
SEASES
F THE SKIN

PRESENTED TO

The New York Academy of Medicine.

By

The Society of the New York Hospital,

March, 1898.

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The Students' Quiz Series.

DISEASES OF THE SKIN.

A MANUAL FOR STUDENTS AND PRACTITIONERS.

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PHILADELPHIA:

LEA BROTHERS & CO.

WESTCOTT & THOMSON,
Stereotypers and Electrotypers, Philada.

WILLIAM J. DORNAN,
Printer, Philada.

PREFACE.

In presenting this little book to the student, for whom it is especially designed, I wish to express my obligations to Drs. Hardaway, Hyde, McCall Anderson, and Jackson, whose various works on dermatology I have freely consulted in its preparation.

The classification at the end of the book is that adopted by the American Dermatological Association, and the section of Additional Formulæ is composed of selected prescriptions which are recommended by their several authors as being especially valuable.

Charles C. Ransom, M. D.

152 W. 48th St.,
New York.

CONTENTS.

DISEASES OF THE SKIN.

TERMINOLOGY AND SYMPTOMATOLOGY.

How are diseases of the skin manifested?

By local or constitutional symptoms or both.

What are local symptoms?

The symptoms which are manifested by change in the skin alone, and are not associated with constitutional disturbance. They may be either *objective*, *subjective*, or both.

What are objective symptoms?

The structural lesions upon the surface of the skin which are appreciable to the sight or touch of the physician and patient.

What are subjective symptoms?

Those which consist in alterations of sensation, as in itching, tingling, smarting, burning, tenderness, and pain, and can be appreciated by the patient alone.

What are constitutional symptoms?

Those symptoms of general systemic disturbance which are sometimes associated with skin diseases. They may be slight or profound, and may occur primarily or secondarily.

Name the two classes into which objective symptoms are divided.

Into 1, primary lesions; 2, secondary lesions.

What are primary lesions?

Those structural changes in the skin with which cutaneous diseases begin. They may continue as such, or undergo modifications and pass into secondary lesions.

Name and describe the eight primary lesions.

Macules, papules, tubercles, tumors, wheals, vesicles, blebs, pustules.

Macules are circumscribed alterations in the color of the skin,

varying in size and color and unaccompanied by elevation or depression of the surface; for example, freckles.

Papules are small circumscribed elevations of the skin, varying in size from mustard-seed to split peas. They may be either round, flat, or conical in form; for example, papules of acne, lichen, and of eczema.

Tubercles are circumscribed solid elevations of the skin, varying in size from a split pea to a cherry. They are of varying color, but are usually reddish or flesh-colored; for example, tubercles of lupus, syphilis, and of leprosy.

Tumors are elevated masses of tissue of variable consistency, differing in size from a cherry to a cocoanut, or even larger; for example, sebaceous cysts, gummata, etc.

Wheals or *pomphi* are flattened oval or circular elevations of the skin, of varying size, whitish or pinkish in hue, evanescent in character, and attended by intense itching; for example, lesions of urticaria (hives), lesions produced by the bite of a mosquito.

Vesicles are small circumscribed elevations of the horny layer of the skin, varying in size from a pin-head to a split pea, and containing serum; for example, vesicles of eczema, vesicles of herpes.

Blebs or *bullæ* are large circumscribed elevations of the horny layer of the skin, varying in size from a split pea to a goose-egg, or larger, containing serum. They may be regarded as enlarged vesicles; for example, lesions of pemphigus, lesions of rhus-poisoning.

Pustules are circumscribed elevations of the horny layer of the skin, of varying size, containing pus; for example, the pustules of acne, the lesions of pustular eczema.

What are secondary lesions?

Those which follow the primary, and are due to the softening and breaking down, or to the organization or metamorphosis, of the products of the primary lesion.

Name and describe the secondary lesions.

Scales, crusts, excoriations, fissures, ulcers, scars, and stains.

Scales or *squamæ* are dry laminæ of epithelial matter which have become appreciable at the surface as a result of some morbid process in the skin; for example, scales of psoriasis and eczema.

Crusts are masses of dry exudation, usually mixed with epithelial scales and dirt; for example, the crusts of impetigo and of eczema.

Excoriations are superficial loss of tissue, usually involving only the epidermal layer; for example, scratch-marks.

Fissures or *rhagades* are cracks or wounds of linear shape, usually occurring in previously infiltrated portions of the skin; for example, chapped hands.

Ulcers are loss of substance of rounded or irregular shape, varying in size, resulting from suppurative destruction of the skin and subcutaneous tissue.

Scars or *cicatrices* are new formations of connective tissue replacing lost substance.

Stains are transitory or permanent discolorations left by cutaneous disease.

DISTRIBUTION AND CONFIGURATION.

Name and define the terms relating to the distribution and configuration of the various skin lesions.

DEFINITIONS.

AGGREGATED.—Collected in patches.

ANNULAR.—In the form of a ring.

CIRCINATE.—Of circular outline.

CIRCUMSCRIBED.—Having a definite contour.

CONFLUENT.—Arranged in close proximity, with coalescence of lesions.

DISCRETE.—Having isolated lesions.

DISSEMINATE.—Without regularity of distribution.

GENERAL.—Scattered over the entire surface irregularly or uniformly.

GYRATE.—Having a serpiginous or gyrate outline. This is usually the result of a coalescence of imperfect circles or semicircles.

IRIS.—Occurring in more or less distinctly defined concentric rings.

MARGINATE.—Having a defined margin.

MULTIFORM.—Exhibiting simultaneously several types of elementary lesions.

PATCH.—The aggregation of several isolated or confluent lesions.

SERPIGINOUS.—Literally creeping, advancing in irregular gyrations.

UNIFORM.—Exhibiting lesions all of one type.
UNIVERSAL.—Affecting the entire surface of the body.

ANATOMY OF THE SKIN.

What is the skin?

The elastic, membranous, protecting envelope of the body. It is important as an organ of sensation, absorption, secretion, and excretion.

Into how many layers is the skin divided, and what are they?

Three. From within outward they are—

1, the subcutaneous connective-tissue layer;
2, the corium, also called derma, cutis, or cutis vera;
3, the epidermis, also called cuticle or scarf skin.

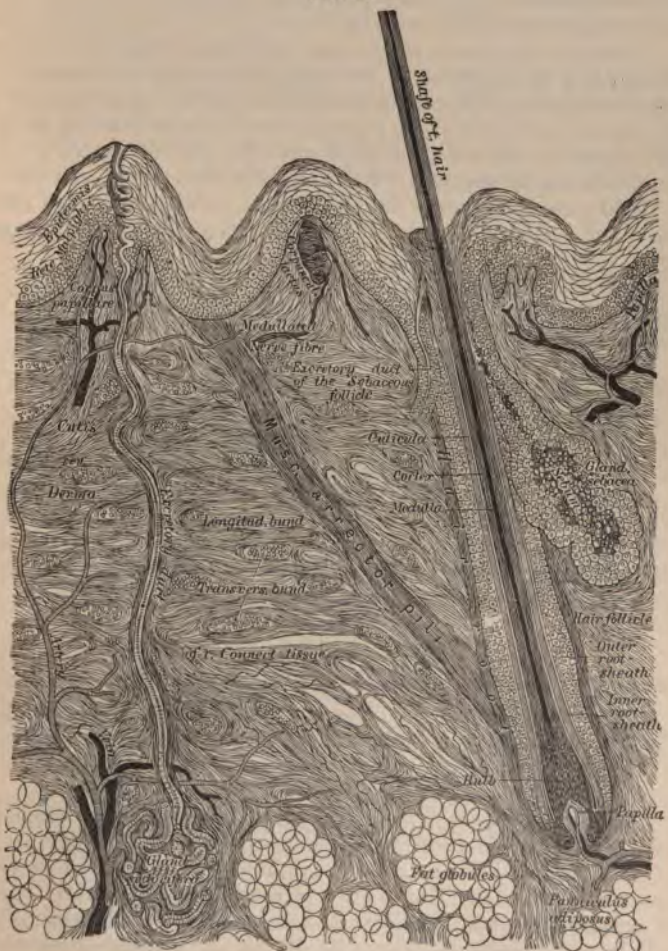
Describe the subcutaneous layer.

It is composed principally of bundles of fibrous connective tissue which rise obliquely from the superficial fasciæ and merge into the substance of the corium. The interfascicular spaces are filled with adipose tissue. In this layer are imbedded the sweat-glands and the bases of the deep seated hair-follicles, and it also contains lymphatics, nerves, and blood vessels.

Describe the corium.

The corium is divided, for facility of description, into the lower or reticular layer and the upper or papillary layer. The lower merges into the subcutaneous tissue beneath, while the upper is separated from the epidermis by a thin basement membrane. The reticular layer is composed mainly of bundles of white fibrous tissue, which decussate, forming a distinct network. The meshes are filled with adipose tissue, and contain blood-vessels, lymphatics, and nerves, and also give passage to deep-seated hair-follicles and the sweat-ducts. The papillary layer is the external portion of the corium, and is only distinguishable from the reticular layer by the greater density of its structure. Its upper surface is roughened by the projection of millions of small elevations, which are termed the papillæ of the corium, and which contain the terminal expansions of the nerves and blood-vessels, and are the most important constituents of the corium.

FIG. 1.



Vertical Section through the Skin (after Heitzmann). Diagrammatic.

Describe the epidermis.

The epidermis is the most superficial portion of the skin. It is divided into four separate layers:

1. Stratum mucosum, or mucous layer, also called the layer of Malpighi, is that portion of the epidermis which lies immediately above the corium. It adapts itself closely to the upper surface of the corium by means of its interpapillary processes, which fit into the depressions between the papillæ. The color of the skin is due to the amount of pigment which is held in the cells of this layer.

2. Stratum granulosum lies next to the stratum mucosum externally, and consists of two or three layers of flattened nucleated cells.

3. Stratum lucidum lies next above the stratum granulosum. It contains from four to six rows of cells that in fresh, unstained sections attract attention by reason of their extreme transparency.

4. Stratum corneum, the thickest stratum, extends from the stratum lucidum to the external surface of the body.

DISEASES OF THE SKIN.

ACARUS FOLLICULORUM.

What is acarus folliculorum?

It is the name of a minute worm-like parasite found in the sebaceous follicles in nearly all persons except new-born children. It gives rise to no symptoms whatever of disease.

ACNE.

Define acne, and describe the symptoms and course of the disease.

Acne is an inflammatory disease of the sebaceous glands, occurring for the most part upon the face, and characterized by the formation of papules, tubercles, or pustules, or a combination of these lesions.

The lesions appear over the face, and sometimes over shoulders and breast, in the form of tubercles, papules, and pustules, the papules varying in color from a bright red to a dark red or violaceous hue, and in size from a mustard-seed to a split pea. The grade of inflammation may be slight or severe, in which latter case there will be considerable inflammatory deposit and induration about the bases of these lesions. After several days or weeks they may disappear by absorption, or may suppurate and form pustules. At

times the suppurative process may be so extensive that small cicatrices and pits may be left in the skin. Scattered over the face among the papules and pustules comedones will almost invariably be found in varying numbers.

It usually appears about the age of puberty, and may remain for several years. It does not often occur in children or for the first time in mature years.

It is an obstinate disease, ordinarily lasting some months. Proper treatment will always obviate the scarring and pitting, even in severe cases.

Is the disease usually severe?

Its severity varies greatly. In some instances it may be represented by one or two lesions only, while in others the face, neck, shoulders, and chest may be covered with unsightly papules, pustules, suppurating tubercles, and abscesses.

Name and describe the different varieties of acne.

1. *Acne papulosa.*—This is the mildest form of acne, and consists of a number of more or less pale-red papules, varying in size from a pin-head to a split pea. Sometimes the little duct in the centre becomes filled with dirt and has a blackened appearance: this condition is known as acne punctata.

2. *Acne pustulosa.*—This is the most frequently observed variety. The inflammation in the papules continues until suppuration takes place, when the papules become converted into pustules. When the inflammation is severe, abscesses containing a large amount of pus mixed with bloody serum may develop.

3. *Acne indurata.*—When the inflammation is developed the base becomes hard and indurated. This form is apt to run into the production of abscesses, and frequently leaves cicatrices of a pitted or atrophic character, *acne atrophia*, or, when a connective-tissue new growth follows their disappearance, *acne hypertrophica.*

4. *Artificial acne* is produced by the external application of tar and other substances, or may follow the ingestion of certain drugs, as the bromides and iodides.

What is the etiology of acne?

The mechanical irritation set up by the retention of inspissated sebaceous matter may be considered as the exciting cause.

While digestive disturbance, constipation, uterine disorders, especially of a functional character, general debility, with loss of mus-

cular tone, are usually the predisposing causes, persons with thick, oily skins are most apt to suffer from acne. Occupation in a dusty or dirty atmosphere will often tend to block up the sebaceous glands.

With what diseases may acne be confounded?

Papular or pustular syphilides and sycosis. The former may be excluded by its general distribution, the longer duration of the individual lesions, the darker red or coppery color, and the accompanying symptoms of the general disease; the latter by its occurrence only in the male and after the full establishment of the beard, it being limited to the bearded portion of the face.

What is the prognosis of acne?

It is an obstinate disease, but is curable. Proper treatment for the scarring and pitting is important.

Describe the treatment of acne.

Both local and constitutional measures must be employed, but success in its treatment depends upon a knowledge of the etiological factor in a given case.

Before adopting any line of general treatment the patient should be thoroughly examined, every organ and every function being carefully looked into. In every case careful dietetic and hygienic measures should be established, and wholesome exercise in the open air should be enjoined. In dyspepsia and constipation remedies appropriate to the condition must be employed. Calomel in small doses will be found of great service when these conditions exist. One half-grain tablet triturate taken at bedtime will often overcome the existing constipation and clean up the furred tongue. Carlsbad salt or Hunyadi-Janos water is also useful for laxative purposes. When the bowels have become more regular a very excellent tonic is—

℞. Tinct. nucis vom., ʒij;
Acidi nitro-muriat. dil., ʒiv;
Vin. xerici, ad ℥iij.
Sig. ʒj t. i. d.

In chlorotic and anæmic patients the different preparations of iron and arsenic will be found of great service. Cold baths and cold spinal douches, with massage, will be found of especial virtue in these cases.

In uterine disturbance ergot is said to be of service. Sulphide of calcium is also recommended in pustular acne. The passage of

FIG. 2.

Dermal Curettes.

FIG. 3.

Fox's Acne Lance and Dermal Curette.

FIG. 4.

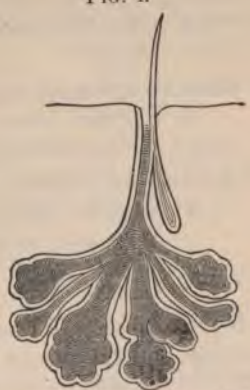


Diagram illustrating seat of deep suppuration in Acne.

cold sounds has been spoken of as a valuable measure, but it of very doubtful efficacy, and has very many objections to its us

Local applications in acne may be of two kinds—soothing a stimulating. In those cases where there is much heat and inflam mation present the soothing application should be adopted; th majority, however, require stimulating applications, and these ar very numerous. Before any lotion is used the skin should be pre pared for it. The retained secretion should be expressed, either by the fingers covered with a thin piece of linen to prevent their slip ping or by one of the various "comedo-extractors," a little instru ment devised for the purpose. The pustules and papules may be freely incised with the little pointed acne-lances, which will not only facilitate the expulsion of the sebaceous plug, but the slight bleeding which follows is of benefit in relieving the engorged blood vessels.

Scraping the skin with the skin curette is one of the best meth ods, and may be employed with advantage in all cases. Washing the face gently or vigorously, according to the irritation of the skin, and rinsing with hot water, afterward drying with a soft towel, is a measure which may be employed by the patient at home, and is best done at night before retiring. If remedial applications are desired, they may be used immediately after this procedure. If the skin becomes rough and chapped from too fre quent washing, the soap may be omitted, sponging with hot water alone being used, after which almond oil or cold cream may be rubbed into the skin.

What remedies are most frequently used locally in acne?

℞. Sulphur. præcip., ʒj;
Adipis benzoinat., ℥j.

Or camphor may be added to advantage:

℞. Sulphur. præcip., ʒj;
Pulv. camphoræ, gr. xx;
Ung. aq. rosæ,
Ung. petrolei, āā. ʒiv.

The following lotion is a very good one:

℞. Sulphur.,
Calamin., āā. ʒij;
Alcohol.,
Aquæ, āā. ℥ij.

When an oily condition of the skin is present the following lotion is especially useful:

℞. Sulphur. præcip.,	ʒiss;
Ætheris,	fʒiv;
Alcoholis,	fʒiiiss.—M.

The following is highly recommended by Dr. Van Harlingen:

℞. Potassii sulphuret.,	
Zinci sulphat.,	āā. ʒss ad ʒj;
Aquæ rosæ,	fʒiv.—M.

The ingredients are each dissolved in one-half the water, forming a clear solution. They are then mixed, and a white precipitate takes place, which is shaken up and allowed to dry upon the face.

The following mercurial preparation is of use in papular acne:

℞. Ung. hydrarg.,	ʒj;
Ung. petrolei,	ʒiij.—M.

Ichthyol is recommended by some:

℞. Ichthyol.,	ʒss;
Lanolin.,	ʒiv.

Resorcin in ointment, 10 to 60 grains to the ounce, is also of service in some cases.

Salicylic acid with sulphur I have found to act well in some cases:

℞. Acidi salicyl.,	gr. xv;
Sulphur. præcip.,	℈ij;
Ung. aq. rosæ,	ʒj.—M.

Chrysophanic acid is said to be useful in chronic sluggish cases, applied to each papule separately. It is apt to produce a severe dermatitis, and should be used with great care.

ACNÈ ROSACEA.

Define acne rosacea, and describe the symptoms and course of the disease.

Acne rosacea is a chronic inflammatory disease of the face, more particularly of the nose and cheeks, characterized by redness, dilatation, and enlargement of the blood-vessels, red inflammatory papules, often associated with acne lesions, and hypertrophy sometimes amounting to deformity.

There are two varieties of cases: the first, which is often mild, consists of simple redness or hyperæmia extending over the nose and sometimes also the cheeks, and is looked upon as a passive congestion. This is often associated with an oily seborrhœa of the parts. This hyperæmia, which is intermittent at first, gradually grows more marked and permanent, and small tortuous blood-vessels ramify through the skin of the affected part. This disease seldom goes farther than the formation of these tortuous and swollen blood-vessels, but sometimes hypertrophy of the connective tissue takes place, with great enlargement and deformity of the nose. The second variety is more closely allied to simple acne. In this the acne papules and pustules form the most prominent symptoms, while bright-red congestion, with some infiltration of the skin, forms the background. It occurs, however, usually in older persons than does simple acne, not showing itself in women before the twenty-fifth or thirtieth year, and in some not until an even more advanced age. The nose is the principal seat of the disease, but it may occur also on the cheeks and sometimes on the forehead.

As a rule, there are no subjective symptoms, though sometimes the lesions may be painful, and at times there is a feeling of heat and burning.

What is the etiology of acne rosacea?

Digestive disturbances are the most frequent cause of the disease. Habitual indulgence in alcoholic or malt liquors gives rise to this condition in various regions of the face. Excessive tea-drinking is also a prolific cause. Exposure to heat or cold is also a factor in its causation. In women, chlorosis, anæmia, menstrual and uterine disorders are the frequent cause.

Is the diagnosis of acne rosacea easily made?

Yes. The localization of the eruption on the nose and cheeks, the redness, acne lesions, dilated capillaries, and at times the connective-tissue hypertrophy and absence of ulceration, are characteristic.

What is the prognosis of acne rosacea?

Treatment improves nearly all cases, but only slight benefit accrues to the form with hypertrophy.

What is the treatment?

Both constitutional and local measures are required. The former adapted to the needs of the individual case. When the

habitual use of spirituous liquors is indulged in, they of course must be interdicted. Correction of the habits with regulation of the diet should be insisted upon in all cases. Iron, cod-liver oil, tonics, laxatives, and the various drugs should be employed as indicated. The same local measures which are employed in simple acne may be used here to advantage. Much good has been done by the use of emplastrum hydrargyri. It should be worn constantly on the affected part for several weeks, changing the plasters every two or three days. For destroying the enlarged capillaries either the knife or electrolysis may be employed. If the knife is employed, the surface of the affected part is scarified; the incisions are made parallel with each other, about one-sixteenth of an inch apart. The second scarification is made at right angles with the first. The method by electrolysis is the same as that used in removing superfluous hairs. The needle, attached to the negative pole of the galvanic battery, is introduced into the blood-vessel at different points along its course. The galvanic current may also be used by means of the metallic roller attached to the negative pole to relieve the hyperæmia or passive congestion in those cases in which this is the only manifestation.

ALBINISMUS.

Define albinismus.

Albinismus is a congenital absence of the normal pigment, either partial or complete, unaccompanied by textural changes in the skin. Persons in whom the loss of pigment is complete are called albinos.

Describe the appearance of an albino.

The skin of the entire body is of a milky-white or pinkish hue and of a delicate texture; the hair is very fine and silky and of a yellowish-white or snowy-white color; the iris is transparent and pinkish, and the pupils are red, due to absence of pigment from the choroid. Owing to the defect of pigment in the choroid there are intolerance of light, nictation, and defective sight. The majority of persons thus affected are of feeble constitution.

In partial albinismus will be found, irregularly scattered over the body, patches of varying size of a milky-white or pinkish hue. The hairs growing upon the patches are also colorless; the eyes are not affected. This condition must be distinguished from vitiligo.

What are the causes of albinismus?

The causes are unknown. The few cases of inherited albinismus

Describe the epidermis.

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ALOPECIA AREATA.

Define alopecia areata, and describe its symptoms and course.

Alopecia areata is a disease of the hair characterized by its sudden fall and the production of perfectly bald, smooth, usually circumscribed or circular patches, unaccompanied by any marked alteration of the skin. It generally affects the scalp, but may also invade other hairy parts of the body.

The disease usually begins suddenly, the patient finding a bald circular spot on his head without knowing when it formed. In some cases there will be a history of severe, often periodic and localized, headache preceding the hair-fall for weeks or months. The size of the patch varies; it may be very small or it may be as large as the palm of the hand. In some cases the patch continues to extend, either at its periphery, retaining its circular form, or irregularly, or several gradually coalesce, forming large irregular patches. The skin of the patches is white and shining, and without any scaliness. In the beginning it may be slightly reddened from hyperæmia. Sensation in the patch may be normal, but is often somewhat blunted.

The disease is usually chronic and tends toward spontaneous recovery. While it is spreading, the hairs at the margin of the patch will be dry and brittle and come out easily; later, when the patch has attained its full development, they will be firmly seated in their follicles and normal in appearance. Sooner or later fine lanugo hairs will appear on the patch. These may fall out, again to be followed by a new crop of white hair, which will remain and, growing stronger, develop into strong colored hairs. Sometimes the hairs will fall out several times before permanent recovery takes place. It usually occurs between the twentieth and fortieth years and is a comparatively rare disease. Jackson reports the proportion as twenty-nine in four thousand.

What is the etiology of alopecia areata?

It is generally conceded to be of tropho-neurotic origin, though by some writers it is held to be parasitic.

With what diseases is alopecia areata likely to be confounded?

With ringworm of the scalp and alopecia syphilitica. From the former it is distinguished by the smoothness of the patches, the complete loss of hair, and the freedom from scabs, while patches of ringworm show numerous broken or "gnawed-off" hairs, a slight

degree of inflammatory action, with formation of scales and crusts. On microscopical examination the fungus of ringworm will be in abundance in the hairs in a case of that disease.

In alopecia syphilitica the loss of hair gives a characteristic ragged appearance to the head, and shows no tendency to the formation of circles. The history of syphilis will aid in the diagnosis.

What is the prognosis and treatment of alopecia areata?

In young people the prognosis is good: the disease tends to spontaneous recovery. In older persons it is not so good. From six months to two years may be given as a reasonable time in which to look for recovery. The disease tends to relapse.

In the *treatment* both constitutional and local measures are indicated. Cod-liver oil, iron, arsenic, phosphorus, strychnine, and quinine are perhaps the drugs most indicated for tonics, while sulphur, tar, carbolic acid, tinctura capsici, tinctura cantharidis, aq. ammoniæ, may be variously used as stimulating applications. Blistering the patches has been advised by some as of value. Painting the patches with pure carbolic acid has of late been advised. The galvanic current has also been recommended, the positive pole being placed on the nape of the neck, while the negative is applied to the patch by means of the metallic roller.

Static electricity is also recommended. Before any application is made the loose hairs surrounding the patch should be removed.

ANGIOMA.

Define angioma.

Angioma is a pathological condition of the skin which consists wholly or in part of permanently enlarged or new-formed blood- or lymph-vessels.

Name and describe the three forms in which blood-vascular growths usually occur.

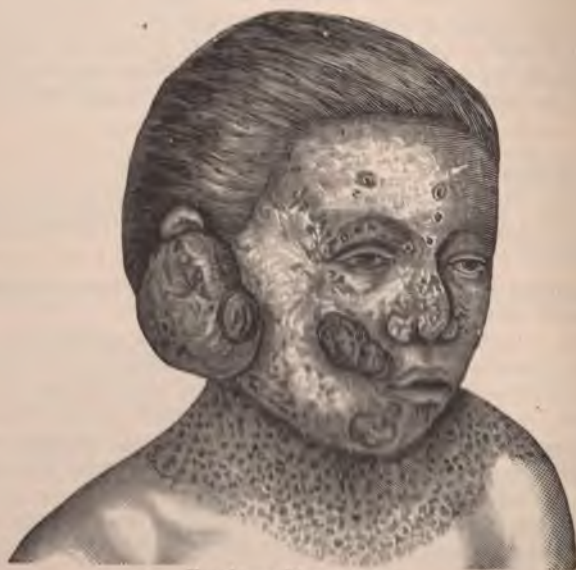
Nævus vasculosus, telangiectasis, and angioma cavernosum.

Nævus vasculosus includes those vascular anomalies of the skin which are either visible at birth or very soon after. They occur as irregularly outlined or distinctly circumscribed patches from the size of a pin-head to that of the palm of the hand, varying in color from a light red to a deep violet or port-wine hue, either flat or very slightly elevated above the surrounding skin. They occur most commonly on the face. They are compressible, and pressure causes a momentary pallor. They usually increase somewhat in extent

FIG. 5.

Alopecia Areata.

FIG. 6.



Xeroderma Pigmentosum.

after birth, until they reach a certain size and become stationary, or accomplish a species of involution and disappear, leaving a whitish or pigmented surface.

Telangiectases are new blood-vascular growths, but differ from nævus vasculosus in being acquired and not congenital. They are generally first observed in adult life. They occur in localized and diffused forms, the latter being, however, very rare. The localized forms of telangiectases are characterized by the formation of pin-head to pea-sized flat or slightly elevated maculæ, diffuse patches, or linear ramification of individual vessels, varying from a pinkish to a violaceous hue. They are non-inflammatory, unaccompanied by subjective sensations, and are seen singly or as multiple lesions, chiefly on the face, though they are frequently found on other parts of the body.

Angioma cavernosum consists of a dense framework of connective-tissue enclosing both large and small cavities, through which the blood freely circulates and communicates with some of the larger adjoining vessels. They are said to be rarely congenital, being acquired soon after birth. Sometimes they originate from a nævus or superficial telangiectasis.

What is the treatment of angioma?

The treatment of angioma, aside from surgical measures, has one principle underlying it—namely, to excite enough inflammatory action in the growth to obliterate the calibre of the vessels composing it. This may be accomplished by various means. In infants: application of collodion or liquor plumbi subacetatis; or sodium ethylate applied by means of a glass rod. Other caustics, as nitric acid and glacial acetic acid, are also available; likewise punctures with a red-hot needle or with a needle charged with nitric acid.

The color of port-wine marks will diminish to a marked degree under the influence of frequent use of electrolysis. For the prominent growths surgical measures must be adopted.

ANGIOMA PIGMENTOSUM ET ATROPHICUM.

What is angioma pigmentosum et atrophicum?

It is a new and rare disease, called also by various other names, as xeroderma pigmentosum, "parchment skin," etc. The affection begins in the first or second year of life, and is characterized by the formation of freckle-like pigment-spots, chiefly involving those parts

of the skin usually uncovered. Interspersed among the pigment-spots are small white atrophic spots and telangiectases. The muscles are atrophied, and there is more or less contraction of the integument. Most cases present also warty or lobular excrescences, which in time take on malignant action. Most cases terminate fatally after the lapse of years. Treatment is unavailing.

ANIDROSIS.

What is anidrosis?

Anidrosis is a diminution or suppression of the secretion of sweat. It occurs as a symptom of several disorders, and is always present in certain diseases of the skin, as ichthyosis, but as a separate skin affection it does not exist. Localized sweat-suppression may result from nerve-injuries.

What are the indications to be met by treatment?

Stimulation of the sweat-secretion. This may be accomplished by the ingestion of large quantities of water, the application of heat in a dry or moist atmosphere, baths, and friction. The internal administration of jaborandi or pilocarpine is of service. In anidrosis accompanying cutaneous diseases the relief of the latter is primarily indicated.

ATROPHIA CUTIS.

What is atrophy of the skin?

Atrophy of the skin is a diminution of the mass of the integument, due to degeneration of one or more of its histological elements. It may be idiopathic or symptomatic.

Name and describe the several varieties met with.

Senile atrophy, general idiopathic atrophy of the skin, atrophic lines or spots (*striæ et maculæ atrophicæ*), glossy skin (*atrophoderma neuroticum*), and the atrophy following certain cutaneous diseases.

Senile Atrophy.—This is the atrophy frequently seen as a result of advancing age. The skin is wasted, thinned, and shrivelled, with unusual dryness and loss of hair, and is covered with brownish maculations. Pea- to finger-nail size, verruciform accumulations of epidermis are often found, chiefly on the face and hands.

General idiopathic atrophy of the skin is exceedingly rare. The entire integument becomes dark, discolored, and visibly thinned,

and appears too small for the body. The sensibility is lessened, and movements of the body are effected with difficulty.

Atrophic lines or *spots* may be idiopathic or symptomatic. The linear form occurs as white bands from one to several inches in length and a half inch or more in width. They are present in groups arranged in somewhat parallel lines. They are depressed below the surface, and are of a glistening white or mother-of-pearl color. The atrophic spots are usually discrete, and are preceded by hyperæmia. As an idiopathic disease its course is insidious and slow. The white atrophic streaks (*lineæ albicantes*) following upon the enormous stretching of the tissue during pregnancy, after the removal of tumors, etc., are examples of the symptomatic variety.

Glossy skin occurs usually about the fingers. The skin is pinkish or reddish, smooth, shining, and glossy, as though burnished, and is liable to become fissured. The affection is accompanied by burning pain, which also precedes it. The disease is very rare and tends to spontaneous disappearance.

What diseases are commonly followed by atrophy of the skin?

Syphilis, lupus, leprosy, favus, scleroderma, and morphœa.

ATROPHY OF THE HAIR.

Define atrophy of the hair, and describe the varieties met with.

An abnormally dry, lustreless, friable condition of the hair which may be either idiopathic or symptomatic.

The lustreless, friable condition of the hair that occurs as a result of eczema, seborrhœa, and the parasitic diseases, and that follows severe constitutional disorders, is an illustration of the symptomatic variety. The idiopathic variety (*fragilitas crinium*) is very rare. There is no apparent general cause for this condition. In these cases the hair is dry and brittle, and splits at the free ends, or the shaft of the hair is thinner at one point than at another. In some instances there will be observed along the shaft shining, bulbous swellings, looking not unlike the ova of pediculi: these little nodes are due to the splitting apart of the hair-filaments, presenting an appearance as if the ends of two brushes had been pressed together and interlocked (*trichorexis nodosa*).

What is the treatment in atrophy of the hair?

Treatment of the symptomatic variety must be directed to the disease which induces the condition. In the idiopathic variety

very little can be done, but the chief reliance is placed upon shaving, with the hope that it will stimulate the nutrition of the hair, and that after a time it will grow in a proper manner.

ATROPHY OF THE NAILS.

What is atrophy of the nails?

Atrophy of the nails is a congenital or acquired condition in which there is deficient or defective nail-production.

Describe the congenital condition.

The nails may be entirely absent or tardy of evolution; occasionally they are seen in defective or distorted shape.

Describe the acquired condition.

In acquired atrophy the nail may be expanded and thin, narrow, and acuminate, friable, furrowed, laminated, ridged, or otherwise distorted.

What are the causes of atrophy of the nails?

Traumatism is the chief cause. Excessive heat and cold and constant maceration in chemicals (as among photographers, druggists, etc.) often injure the nails. Changes consecutive to certain cutaneous diseases, as eczema, psoriasis, and the parasitic affections, all serious disturbances of systemic nutrition, such as are incident to prolonged fevers, tuberculosis, etc., affect the nutrition and development of the nail.

What is the treatment?

The treatment will depend upon a due appreciation of the etiological factor. When dependent upon eczema or psoriasis, constitutional and local remedies appropriate to these conditions must be employed. Constitutional disorders must be combated by measures adapted to the individual case.

BEDBUG ERUPTION.

Describe bedbug eruption.

The bite of the bedbug is characterized by a lesion in appearance similar to an urticarial wheal, which upon subsidence leaves a hemorrhagic macule, which finally, in the course of several days, disappears. The irritation is often very severe, but may be relieved by the application of alkaline or acid lotions, cologne-water, lotion

of carbolic acid, etc. A pigment of salicylic acid 1 part and flexible collodion 19 parts has been highly recommended.

BROMIDROSIS.

What is bromidrosis?

Bromidrosis is a functional disorder of the sweat-secretion in which the perspiratory fluid exhales an offensive or abnormal odor. There is usually an excessive secretion of sweat, though the amount may be normal. The affection is most frequently of a local character, and is seen about the axilla, the perineum, the genitals, and the feet. It is supposed to be due to a micro-organism called the *bacterium fœtidum*, and also to decomposition of the epidermis.

What is the treatment of bromidrosis?

Frequent cold bathing and the application of astringent lotions or dusting powders containing salicylic and boracic acids.

CALLOSITAS.

Define and describe the appearance of callosities.

Callosities are hard, thickened, and horny patches of the external layers of the skin, without necessary implication of the deeper structures.

They occur chiefly upon the hands and feet as hard, thickened, and horny patches of a grayish or yellowish color, varying in size and shape, and unattended by pain. They are slightly elevated in the centre, and merge gradually into the healthy skin.

What are the pathology and cause of callositas?

Callositas is simply an hypertrophy of the epidermal layers of the skin. It is usually the result of pressure and friction; as, for example, that caused by the handling of various tools in the arts, and on the feet by the pressure of ill-fitting shoes; exceptionally it may arise without apparent cause.

How is callositas treated?

If the causes are removed, the accumulation, as a rule, gradually disappears. The removal of the accumulation may be effected by local measures. The part should be repeatedly soaked in hot water or in hot bran-water to macerate the skin, when the accumulation can be scraped off with a knife. Applications of salicylic acid, 10 to 20 per cent., either in ointment or plaster, is a most effective measure. Lactic acid is also useful as a local application.

CANITIES.

Define and describe canities.

Canities is that condition of the hair in which it becomes gray from loss of pigment. Canities may be either congenital or acquired. When congenital the grayness is usually limited to tufts: this form is rare, but has been observed to be hereditary in some cases. The acquired form may be either premature or senile. Senile grayness of the hair is very common, and begins usually about the thirty-fifth to the fortieth year of age. Falling of the hair usually accompanies this form. It is not unusual to find a gradual graying of the hair as early as the twentieth year. The tendency to premature grayness seems to be hereditary in some families. The hair sometimes remains gray after alopecia areata and some other diseases of the scalp. Cases are noted where the normal color of the hair has returned after some months or years. There are authentic cases of the change to grayness in a single night from sudden shock.

What is the cause of canities?

The causes of canities are obscure. The various conditions which impair general nutrition are influential as causative factors. Heredity has a marked influence. Excessive brain-work or mental worry seems to have a marked influence. Nervous shocks or great fear produces the sudden bleaching of the hair.

What is the treatment of canities?

Measures calculated to improve nutrition and the general tone of the system may be of service, but all treatment is usually unavailing.

CARBUNCLE.

What is a carbuncle?

A carbuncle is a circumscribed inflammation of the skin and connective tissues, larger than a boil, characterized by numerous openings and terminating in a slough.

Describe the symptoms of carbuncle.

It begins as a hard and excessively tender swelling from one to six or more inches in diameter, and elevated from a quarter to a half inch above the surface. It is at first red, and then becomes a livid color, and the pain is of a burning and throbbing character. The inflammatory process reaches its height within a couple of weeks,

and several sieve-like openings form, through which is visible a grayish-yellow slough: presently these openings coalesce and form a ragged cavity, from which pus and necrosed tissue are discharged. It usually appears singly.

What is the duration of the disorder?

The duration of carbuncle is, as a rule, from two to three weeks, when the slough separates, granulations spring up, and the ulcer heals, leaving on its site a puckered and discolored scar. On the other hand, the slough may extend at the edges of the opening, and lead to the involvement of other structures, when several months may elapse before complete recovery takes place.

Upon what part of the body is it usually observed?

Its favorite seats are on the back of the neck, shoulders, back, and buttocks. The hairy scalp, the abdomen, and lips are looked upon as situations of especial danger.

Is there any constitutional disturbance with this affection?

The disease is often ushered in with considerable constitutional disturbance, and in severe cases, especially in the weak or aged, a pronounced typhoid condition may supervene, and death follow from pyæmia, septicæmia, or exhaustion.

How would you distinguish carbuncle from a boil?

By its occurring singly, its greater size, its flatness, and the occurrence of numerous openings upon its surface.

What is the etiology of carbuncle?

Carbuncles are often due to the same influences which produce furuncles, though the former are more frequent in persons of mature years. All conditions of general ill-health predispose to the occurrence of carbuncles. Patients with diabetes and uræmic disease are especially predisposed to them. The introduction of one of the pus microbes is now held to be the cause, but it is no doubt true that a suitable soil is necessary in order that it may exert its definite influence.

What is the constitutional treatment demanded?

The constitutional treatment should be strongly supporting. Iron, quinine, and alcoholic stimulants are indicated. Anodynes should be given freely to relieve pain. Small doses of sulphide of calcium are said to exert a good influence.

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Describe the symptoms of carbuncle.

It begins as a hard and excessive one or more inches in diameter, and el inch above the surface. It is at f color, and the pain is of a burning inflammatory process reaches its

into tumor masses and then to break down and ulcerate. This is the most malignant form of cancer.

What is the treatment in these forms of cancer?

It is essentially the same as that pursued in the early forms of Epithelioma and Sarcoma (which see).

CHLOASMA.

What is chloasma?

Chloasma is an excessive deposit of pigment in the skin, occurring in variously-sized and shaped patches of a yellow, brownish, or blackish color. It is distinguished from freckles in that it is more diffuse.

Describe the appearance of chloasma, and give the forms into which it is usually divided.

Chloasma is most frequently seen upon the forehead and face, but may also occur elsewhere upon the body, on an otherwise normal skin, as variously shaped and sized, irregular, ill-defined patches of varying color, or it may extend over the entire surface as a diffuse discoloration. It is usually divided into two forms, idiopathic and symptomatic: in the former group are included those forms which are the result of traumatism, as scratching, blistering, sunburn, etc. In the latter are included all forms of discoloration caused by general diseases, as tuberculosis, cancer, malaria, and Addison's disease. The localized patches of discoloration observed upon the foreheads or faces of middle-aged women is termed chloasma uterinum. It is usually associated with pathological conditions of the uterine organs, or more frequently with pregnancy. This condition is known to the laity as "moth" or "liver spots." So far as the liver is concerned, there is no ground for believing that there is any causal connection between it and the discoloration.

With what diseases may chloasma be confounded?

It may be mistaken for leucoderma, in which the white spots are hyperpigmented around their border, but in chloasma the discoloration is general and there is an absence of the dead-white spots. Chloasma also resembles tinea versicolor, but the latter may be distinguished by the fact that it never occurs on the face, but on the trunk and arms, and the spots are always made scaly by scratching.

What are the local measures adopted?

Deep crucial incisions, with application of strong carbolic acid to the interior, will relieve the tension and hasten the separation of the slough. Painting with cantharidal collodion for half an inch around the margin is said to do good. Some surgeons advise compression by strapping with adhesive plaster. The hypodermic injection of a 5 to 10 per cent. carbolic lotion has been advised. When the slough has come away and the ulcer is granulating, dressing with iodoform is advised. In old and debilitated subjects surgical measures should be employed with great care if at all.

CARCINOMA CUTIS.

Enumerate the different forms of carcinoma of the skin.

The most common form is *epithelioma*, which will be described under that head; the others are *carcinoma lenticulare*, *carcinoma tuberosum*, and *carcinoma melanodes* or *pigmentodes*.

Describe carcinoma lenticulare.

Lenticular cancer (called also "*scirrhous*," "hard," "fibrous," or "connective-tissue cancer") is usually secondary to carcinoma of the breast. It is characterized by glistening, dense, reddish or brownish, flat or slightly-elevated papules or tubercles, from pea to bean or larger size, at first separate, later running together, forming dense cancerous infiltration of the integument, involving neighboring glands, breaking down, and ending fatally.

Describe carcinoma tuberosum.

Tuberose carcinoma is a rare affection; it is also generally secondary, though it may occur primarily. The lesions are multiple, occurring as tubercles or nodules, from the size of a bean to that of an egg or larger. They are firm, hard, deeply imbedded in the skin and subcutaneous tissue, of a dull reddish-brown or violaceous color, sooner or later breaking down into ulcers and terminating fatally.

Describe carcinoma melanodes or pigmentodes.

Pigmented or melanotic carcinoma often begins in warts or moles, and is most commonly seen upon the hands, feet, face, and genitals. The lesions are at first in the form of multiple small pinhead to pea-sized round or oval, soft or hard papules, tubercles, or nodules of an iron-gray, brownish, or black color. They tend to aggregate

into tumor masses and then to break down and ulcerate. This is the most malignant form of cancer.

What is the treatment in these forms of cancer?

It is essentially the same as that pursued in the early forms of Epithelioma and Sarcoma (which see).

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What is the prognosis of chloasma?

The prognosis depends upon the removal of the etiological factor. If this can be accomplished the prognosis is favorable. The discoloration which is removed by local measures is apt to recur.

What is the treatment of chloasma?

Constitutional remedies must be adapted to each individual case; there are no specific remedies. External applications act by removing the epidermis with the rete-cells, which contain the pigment. Care must be exercised in the selection of remedies for this purpose, as some tend to increase the pigmentation. Nightly friction with green soap is very serviceable. Peroxide of hydrogen painted on once or twice a day is highly recommended. Solutions of corrosive sublimate are also highly recommended, but Hardaway discountenances their use. Ammoniated mercury and subnitrate of bismuth, a drachm each to the ounce, are also serviceable.

What is argyria?

Argyria is a general discoloration of the skin which sometimes follows the prolonged internal use of nitrate of silver.

How is it treated?

Iodide of potassium in the average dose has been successful in several instances.

CHROMIDROSIS.

What is chromidrosis?

Chromidrosis is a very rare functional disorder of the sweat-glands in which the sweat assumes various shades of color, as blue, red, or yellow. Not infrequently this condition is feigned by hysterical patients.

Upon what parts is it most frequently observed?

Upon the lower eyelids, forehead, cheeks, abdomen, and scrotum. Sometimes a fine brickdust-like deposit is seen in connection with it.

What are the causes of chromidrosis?

The causes of it are unknown. Some cases have been thought to be due to the presence of indican; in others bacteria have been demonstrated; while in other cases examination gave negative results.

What is the treatment?

General tonic treatment, with the same local measures that apply to hyperidrosis.

CHROMOPHYTOSIS.

SYNONYMS.—Tinea versicolor; Pityriasis versicolor.

What is chromophytosis?

Chromophytosis is a vegetable parasitic disease, characterized by light-yellow or buckskin-colored patches of irregular shape and size, either slightly scaly or easily rendered so by scratching.

Describe the clinical appearance of chromophytosis.

The disease begins in small round spots that gradually enlarge, and by coalescing and extending, large irregular patches of the eruption are formed. The spots may remain discrete, and there may be only a few patches scattered here and there on the trunk. The spots usually first appear over the sternum, but may extend over the entire trunk, on the neck, and on the arms and thighs. The patches are usually covered with a fine desquamation, which becomes more marked upon scratching.

The disease is not usually itchy, but may become quite so when the body is warm and sweaty. The color is a light brownish-yellow or buckskin color, but may be a dark yellow or brown.

What is the etiology of chromophytosis?

Chromophytosis is due to a vegetable parasite, the *microsporon furfur*, which invades the superficial layers of the epidermis.

How do you examine it microscopically, and what is its appearance?

A few of the scales scraped from a patch are moistened with liquor potassæ and placed under a power of from 350 to 500 diameters. The parasite is seen to consist of round spores, of a uniform size, arranged in little groups and clusters. The spores are joined by interlacing mycelia. The arrangement of the spores in groups is characteristic.

What is the progress of the disease?

Its progress is slow, and it is very persistent. Without treatment it may last for years. Though parasitic, it is not highly contagious.

Is the diagnosis difficult?

Usually not. Vitiligo, chloasma, and the macular syphilides are the diseases it most resembles. In vitiligo the patches are white, the border only being dark. Chloasma does not occur upon the trunk, but on the forehead and face, situated where chromophytosis is never found. The macular syphilide does not occur in large patches and sheets, and is never confined to the localities of chromophytosis, and there are usually the concomitant symptoms of syphilis. Microscopical examination will always determine the diagnosis.

What is the prognosis?

Invariably good. Two or three weeks usually suffice to effect a cure, but without close watching it is apt to recur.

Are persons suffering from phthisis more prone to this affection than others?

No, though this idea has been held by some. It doubtless originated from the fact that phthisical subjects are usually swathed in heavy woollen garments, keeping the skin warm and moist, the condition most favorable to the growth of the fungus.

What is the treatment of chromophytosis?

The simplest and most efficient treatment is the application of a lotion of sodium hyposulphite, one drachm to the ounce of water, applied twice daily. The applications should always be preceded by washing the parts thoroughly with sapo viridis and hot water.

CLAVUS.

What do you understand by clavus?

Clavus, or corn, is a small localized conical thickening of the epidermis. The base, inverted and flattened, rises somewhat above the level of the skin, the apex pressing upon the papillæ.

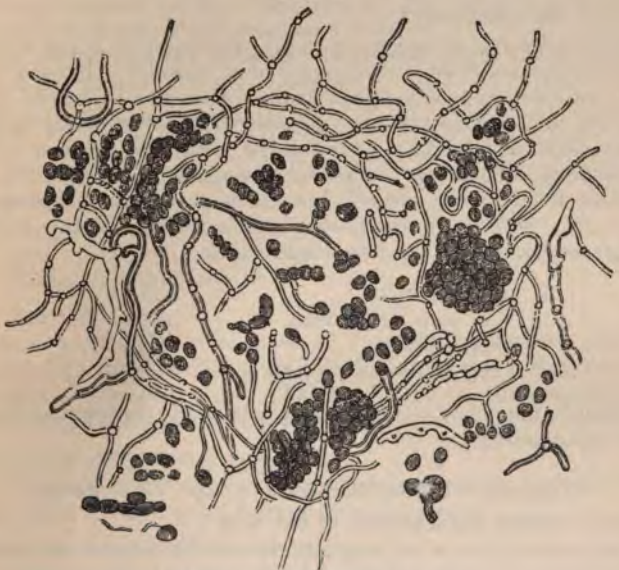
What are its clinical features?

Situated usually upon the dorsum of the toes, the corn appears as a pea-sized, flattened, horny, polished thickening of the skin, resembling a small callosity. It is frequently painful, and invariably so on undue pressure.

What is a "soft" corn?

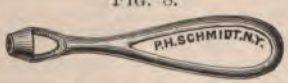
"Soft" corn is the same formation occurring where the skin is macerated by sweat, as between the toes.

FIG. 7.



Microsporon Furfur (after Kaposi).

FIG. 8.



Comedo-extractor.

What are the causes of corns?

They are generally the result of ill-fitting shoes, but may be caused by continued friction and pressure of any kind.

What is the treatment?

The preventive treatment of corns requires well-fitting shoes to secure protection from friction and undue pressure. Radical treatment consists in excision by the knife. This may be greatly facilitated by first macerating the epidermis by poultices or prolonged immersion in hot water. Covering the corn with a piece of lint soaked with sodium carbonate and covered with oil-silk will also accomplish this. The use of chemical agents alone will often suffice to remove the corn, the most valuable remedy for this purpose being salicylic acid in the following formula:

R. Acid. salicyl.,	ʒss;
Ext. cannabis indicæ,	gr. v;
Collodion,	ʒij.—M.

Sig. Apply with camel's-hair pencil.

Corn plasters made of felt, with a hole in the centre, may also be worn to advantage.

COLLOID DEGENERATION OF THE SKIN.

What is colloid degeneration of the skin?

This process is a colloid degeneration of the connective tissue of the corium. It is characterized by the appearance upon the forehead, the malar regions, or the bridge of the nose of small pinhead- to pea-sized, shining, lemon-yellow papules, that have the appearance of vesicles, but when pricked exude no fluid, but a yellowish jelly. The condition is exceedingly rare.

What is the treatment?

Enucleation of the deposit with a dermal curette.

COMEDO.

Define comedo, and describe the appearance of a lesion.

Comedo is a functional disease of the sebaceous glands, which is distinguished by yellowish or whitish pinhead-sized elevations, containing in their centre blackish points, and without subjective symptoms.

A single one appears as a pinhead-sized, slightly elevated, whitish

or yellowish papule, with a black top looking like a grain of gunpowder. If the skin be compressed on both sides of the papule, a filiform whitish or yellowish mass may be extruded, which is popularly supposed to be a "flesh-worm," but which is merely the inspissated contents of the sebaceous follicles.

It is observed chiefly upon the face, neck, chest, and back, and between the ages of fifteen and thirty.

What is the cause of comedones?

They may be attributed in part to a sluggishness of the skin and of the general functions, but more particularly to disturbances arising from indigestion, menstrual disorders, and anæmia. The disease is preëminently one of the period of puberty.

A small parasite is sometimes found in the sebaceous mass. (See *Acarus folliculorum.*)

State the pathology.

Comedones consist of a mass of inspissated sebaceous matter commingled with epithelial cells, which is located in the excretory duct of the sebaceous gland. The black tops are particles of dust which have adhered to the surface of the mass.

What is the prognosis of comedo?

Under proper treatment the prognosis is good, though the disease is often refractory: it is very prone to recur.

What is the treatment of comedo?

Attention to diet and hygiene, etc., as in acne, and measures tending to the relief of constipation, indigestion, uterine disorders, and the other systemic disturbances are always indicated. By local treatment we seek to remove the accumulated sebaceous matter and restore to the glands their functional activity.

Steaming the face or bathing with very hot water, and frictions with sapo viridis or other strong soaps, are measures of great utility which should be carried out every night. If the skin is roughened and irritated by these measures, discontinuing them for a day or two and applying a bland oil or cold cream will suffice to relieve the irritated condition. Scraping the face with the dermal curette is always of great advantage. The larger and more firmly-seated plugs may be removed with a watch-key or comedo-extractor. For stimulation of the glands sulphur in ointment or lotion is the most valuable remedy. The applications used in acne are also serviceable in this condition.

CORNU CUTANEUM.

What are cornua cutanea?

Cornua cutanea are circumscribed hypertrophies of the epidermis, forming irregular-shaped, spur-like excrescences of different sizes.

What are their clinical features?

When fully developed these cornua scarcely differ at all in looks and structure from those found in the lower animals. They are solid, hard, dry, and wrinkled, usually elongated and roundish or conical, but sometimes flattened and button-like, of a yellowish, brownish, grayish, or black color. They are usually single, but may be multiple, and occur most frequently about the face, scalp, and penis.

They are slow in their development, and may be shed spontaneously, never to return or shortly to reappear.

At what age do they occur?

They commonly occur upon elderly people, though they are sometimes also found in the young.

What is the cause of cutaneous horn?

Their occurrence is very rare and their cause unknown: upon the penis, however, they are very often derived from acuminated warts.

What is the pathology?

They are first developed either within a closed atheromatous cyst or from remarkably elongated papillæ of the corium. They are made up of cornefied and hypertrophied epidermal cells.

What is the treatment?

Horns may be removed by extirpation, after which the surface upon which they were implanted should be carefully cauterized to prevent their reproduction.

CYSTICERCUS CELLULOSÆ.

Describe the condition produced by the cysticercus cellulosæ.

The presence of the cysticerci in the skin is characterized by the appearance of a number of tumors from the size of a pea to that of two peas, rounded or oval in outline, smooth and firm. Having attained a certain size, they may remain unchanged for years, new tumors arising from time to time. The tumors may be mistaken for lipoma, carcinoma, sarcoma, molluscum epitheliale,

sebaceous cyst, or syphilitic tumors. Microscopic examination reveals the presence of the parasite.

DERMATALGIA.

SYNONYMS.—Neuralgia of the skin; Rheumatism of the skin; Dermalgia.

What is dermatalgia?

Dermatalgia is pain of the skin, and occurs without a lesion. The suffering may vary from mere discomfort to agony. Usually only a small patch is affected at any one time. At times, however, there may be several painful areas, and in rare instances the entire surface may be involved.

It occurs in middle life in either sex, and is not confined to hysterical or nervous individuals.

What is the cause of dermatalgia?

As an idiopathic affection the cause is often difficult to determine. It has been called a rheumatism of the skin. It is often a pure neuralgia, the result of anæmia, chlorosis, malaria, etc.

What is the treatment?

The treatment must be general and directed to the patient's constitution. Whatever condition is likely to arouse reflex nerve-irritability must be inquired into and combated. Local treatment should be tried, though it is not usually successful. Galvanism, blisters, morphia, and other sedatives may be applied. Tincture of aconite, pure, often gives relief; a compress soaked in it should be firmly bound to the part.

DERMATITIS.

What do you understand by the term "dermatitis"?

The term dermatitis is usually limited to those varieties of inflammation of the skin due to the action of irritants, whether the morbid influence is from without or is the result of the ingestion of drugs.

Name the varieties of dermatitis.

Dermatitis traumatica, dermatitis calorica, dermatitis venenata, dermatitis medicamentosa.

What is dermatitis traumatica?

All inflammations of the skin caused by trauma, such as excoria-

tions and abrasions due to scratching, the pressure of tight or ill-fitting shoes, awkwardly applied bandages, etc. When the irritation is long continued there are marked induration and pigmentation.

Treatment consists in removing the cause and applying remedies of a soothing character.

Describe dermatitis calorica.

In this group are included the effects on the skin of varying degrees of heat or cold. There may be present all grades of disturbance, from a slight erythema to a gangrene of the skin.

What is the treatment of dermatitis calorica?

In simple burns a saturated solution of sodium bicarbonate or of alum will relieve the pain and inflammation. Burns of the second degree—*i. e.* where blisters are formed—may be treated by the same drugs in weaker solution. The blisters may be opened and the contents evacuated, care being taken not to remove the cuticle, as it makes the best protection to inflamed tissues beneath. Carron oil may also be applied to advantage. In dermatitis calorica from excessive cold (frostbite), if seen at once, the patient should be taken into a cold room and the heat restored to the part by rubbing with snow or by application of cold water. Ulceration and sloughing must be treated by the usual antiseptic methods.

In *chilblains* stimulation is usually needed. The itching can be much relieved by painting with belladonna liniment.

Describe dermatitis venenata.

Dermatitis venenata is that form of cutaneous inflammation produced by contact with some irritating agency, either animal, vegetable, or mineral. In the vegetable kingdom over sixty different plants may give rise to this condition. Those more frequently met with are *Rhus toxicodendron*, or poison ivy; *Rhus venenata*, or poison sumach; and *Rhus diversiloba*, or poison oak. The susceptibility of individuals varies greatly, some being affected by the near vicinity of these plants, while others may handle them without harm. The disease is characterized by inflammation of the skin. Sometimes it is merely an erythema or there are a few scattered papules, or else there supervenes an acute swelling of the skin, with the formation of vesicles, pustules, and blebs. There are marked sensations of itching and burning. The hands, face, and genitalia are usually involved; at times it may extend over the entire surface. The effects of exposure show themselves

FIG. 9.

Dermatitis Venenata from Poison-ivy.

in from a few hours to four or five days. The course is acute, ending favorably in from one to six weeks. The poisonous principle, a volatile acid, may be conveyed in an early stage of the affection from one part to another or to a second person, but after the poison has been absorbed or removed by washing there is no risk of contagion.

Give the treatment for dermatitis venenata.

It is well in all cases to begin by washing the parts thoroughly with soap and water, to get rid of the poisonous principles; then follow with the indicated applications. Among the most valuable are lotio nigra, saturated solution of boric acid, with ½ to 2 drachms of carbolic acid to the pint; fluid extract of grindelia robusta, 2 to 4 drachms to the pint of water; hourly mopping with solution of

zinci sulphas. 1 to 4 drachms to a pint of water. A 2 to 4 per cent. solution of creolin in water has proved of the greatest service in my hands.

What is dermatitis medicamentosa?

In this group are included all eruptions caused by the external or internal use of various drugs. These disturbances occur in well-defined groups and are more or less alike in their features. They may be erythematous, papular, urticarial, vesicular, pustular, or bullous.

What are the more common drugs giving rise to cutaneous eruptions?

Acidum salicylicum, sodii salicylas, arsenic, antipyrine, atropia (or belladonna), bromides, chloral, copaiba, cubebs, digitalis, iodides, mercury, opium (or morphina), quinine, stramonium, and turpentine.

Give frequency and type of eruptions resulting from the use of the above-named drugs, in their order as given.

Acidum Salicylicum or Sodii Salicylas.—Infrequent. Erythematous, urticarial, vesicular, and petechial rashes.

Arsenic.—Very infrequent. Papular, pustular, petechial, vesicular, and erysipelatous lesions, excessive pigmentation from long-continued administration. Hutchinson asserts that herpes zoster follows its use.

Antipyrine.—Frequent. Erythematous, erythemato-papular, and an eruption that resembles measles and consists of slightly elevated, reddish, discrete, or confluent papules that are accompanied by sweating and pruritus and followed by slight desquamation.

Atropia (or Belladonna).—Frequent. Erythematous, greatly resembling scarlatina; appears in well-defined patches of a fugitive character, mostly about the face and neck. The pupils are dilated; there is an absence of fever, and no desquamation follows.

Bromides.—Frequent. Pustular, papulo-pustular; at times furuncles form, and even ulceration may take place.

Chloral.—Not uncommon. Erythematous, papular, vesicular, urticarial, and purpuric.

Copaiba.—Frequent. Urticarial, maculo-papular. It is important from its resemblance to the erythematous syphilide. Occurs most frequently on the abdomen, feet, hands, and arms. The erythematous syphilide is distinguished by its not being attended

by itching and by its different color and configuration. Moreover, the person taking copaiba is apt to emit a disagreeable resinous odor from the skin.

Cubebs.—Infrequent. Erythematous, with occasionally small papules.

Digitalis.—Uncommon. Macular and maculo-papular.

Iodine (Iodides).—Frequent. Erythematous, papular, pustular, bullous, urticarial, tubercular, and hemorrhagic. The most familiar is the papulo-pustular (iodine acne). Catarrh of the air-passages is also often present.

Mercury.—Exceedingly rare. Erythematous. The occurrence of any eruption following the ingestion of mercury is denied by White and Hyde.

Opium (or Morphine).—Frequent. Erythematous and urticarial. Pruritus is the most frequent effect upon the skin.

Quinine.—Common. Erythematous or urticarial; may be papular, vesicular, bullous, petechial, and even gangrenous. The erythematous form with desquamation, which is frequent, resembles scarlatina.

Stramonium.—Infrequent. Erythematous.

Turpentine.—Uncommon. Erythematous, vesicular, and papular.

What causes the eruption in dermatitis medicamentosa?

The eruption is doubtless of neurotic origin in most cases. Occasionally it may be due to a direct irritation of the skin by the drug during its elimination.

DERMATITIS EXFOLIATIVA.

SYNONYMS.—General exfoliative dermatitis; Recurrent exfoliative dermatitis; Desquamative scarlatiniform erythema; Acute general dermatitis; Recurrent exfoliative erythema.

What is dermatitis exfoliativa?

Dermatitis exfoliativa is an acute or chronic, general or partial cutaneous inflammation in which the epidermis is freely shed in large or small scales. From the clinical standpoint it may divide into two forms—the acute form (acute exfoliative dermatitis) and the chronic form (pityriasis rubra).

Describe acute exfoliative dermatitis.

This is a form rarely seen, lasting generally several weeks c

months, but often followed by relapse. An attack is usually ushered in with a chill, followed by some fever and constitutional disturbance. The involvement of the skin is first local, but soon the entire surface may be implicated. The skin is at first bright red, violaceous, or of a dusky hue, and free from scales, accompanied by more or less itching. In a few days the cuticle begins to desquamate in large or small thin, papery scales. The hair is shed in the course of the disease, and sometimes even the nails. The mucous membrane may also participate in the general process. Some cases are complicated by an eruption of vesicles, blebs, or pustules.

What is the treatment?

Internally, tonics as indicated, together with diet and general hygienic care. Externally, soothing and emollient applications.

Describe the chronic form (pityriasis rubra).

As in the acute form the disease begins in small localized patches: these coalesce and gradually extend over the entire surface. The skin may be a dark red or bluish red, but is rarely thickened. The desquamation is very free; the scales are thin, papery and imbricated, varying from a line to an inch or more in diameter. When free from scales the skin has a shining and tense appearance. There is but little itching, but the skin feels too small, and the patient complains of chilliness even in the warmest weather. Febrile exacerbations recur from time to time, and the disease progresses to a lethal termination. It is an extremely rare affection, and its causes are obscure.

What is the treatment?

Very little can be accomplished except to make the patient more comfortable. The general treatment should be tonic. Emollient applications, such as vaseline and lanolin, add to the comfort of the patient.

DERMATITIS FACTITIA.

SYNONYM.—Feigned eruptions.

What are feigned eruptions?

Feigned or artificial eruptions are those that have been produced by hysterics or malingerers with the intent of deceiving. They are not uncommon. The eruption may be in erythematous or excoriated patches, such as might be produced by friction or mustard, or the

lesion may be bullous, pustular, or deeply ulcerative, such as might be produced by the action of cantharides, croton oil, or various corrosive substances. It is usually limited in extent, and in such location as would be easily accessible to the hands. In right-handed persons it would be more apt to occur on the left side.

DERMATITIS GANGRENOSA.

What is dermatitis gangrenosa?

Dermatitis gangrenosa is an inflammatory condition of the skin, the clinical features of which are erythematous macules which develop into circumscribed gangrenous patches. It has two forms, symptomatic and idiopathic.

What is the symptomatic form?

This includes that group which has been frequently observed in connection with diabetes and with cerebral and spinal disorders. It has also been observed in connection with varicella, vaccinia, pemphigus, and herpes occurring in cachectic subjects.

Describe the idiopathic form.

This form is exceedingly rare, and is characterized by erythematous, reddish or purplish, painful or painless, circumscribed spots, occurring symmetrically, which gradually pass into gangrene and sloughing. The progress of the malady is tedious, and it may end either in recovery or death. Gangrene of both forms should be treated on general principles.

DERMATITIS HERPETIFORMIS.

SYNONYMS.—Hydroa; Herpes gestationis; Pemphigus pruriginosus; Duhring's disease.

Define dermatitis herpetiformis, and describe the various types.

Dermatitis herpetiformis is a chronic skin affection characterized by multiformity of lesion. It occurs in successive outbreaks, in which the eruption may be herpetiform and vesicular, erythematous or pustular, or in which wheal-like lesions or bullæ may predominate. Severe and intolerable itching, with more or less constitutional disturbance, is often present. It is usually tedious in its course, with a decided tendency to relapses.

The erythematous type: the eruption in this type has the clinical

features of erythema multiforme, which it closely resembles, developing in successive crops, the first disappearing to make way for the later ones. It occurs, however, upon any part of the body, and has no predilection for the extremities, as is the case with erythema multiforme. Vesicles are often present, either developing from the erythemato-papules or as such ab initio. The lesions may continue in the same type or pass slowly through several stages of development.

The papular type: this type is rarely found alone, but is seen together with the vesicular type, of which it is in reality an early stage. The papules soon develop into vesicles, as in the vesicular form of erythema multiforme, but the decided tendency toward grouping will distinguish it from that affection.

The vesicular type: this type is the one most frequently met with: it is distinguished by pinhead- to pea-sized, flat, slightly elevated, hard, angular, irregularly outlined vesicles, tensely distended with their contents. They are arranged in irregular groups, and each is situated upon a slightly reddened or erythematous base or upon the apparently normal skin. The groups resemble those of herpes zoster. The vesicles occur in successive crops, are tense and firm, and unless broken are usually absorbed. It may continue as such or become bullous or pustular. The mucous membrane of the oral cavity may also be affected. The vesicles, being macerated, readily rupture, leaving painful erosions.

The pustular type: this type is very rare, except as it occurs with the vesicular variety. The pustules are single or clustered, and surrounded by a livid areola.

The bullous type: this type is generally the severest form of the disease, and is usually attended by a higher grade of inflammation. The bullæ may be sparse or plentiful, and bean- to egg-sized, with cloudy, lactescent, hemorrhagic, or puruloid contents. The bullæ may develop from any of the preceding types or from apparently healthy skin. The characteristic disposition toward grouping is also present in this type.

In the *mixed type* the various lesions may be intermingled, no given type predominating.

What are the subjective symptoms of dermatitis herpetiformis?

Intense and persistent itching, pricking, and a sense of heat and burning are always present, and are exceedingly troublesome, causing insomnia and resulting melancholia.

Is there any constitutional disturbance?

As a rule, it is not marked except in the bullous type. Preceding an outbreak slight chilliness, headache, and general malaise are often experienced.

Give the etiology and treatment of dermatitis herpetiformis.

The *causes* are not understood, but they are supposed to be of a neurotic origin. The phenomena of the disease in the late stages of fatal cases are undoubtedly septicæmic in origin.

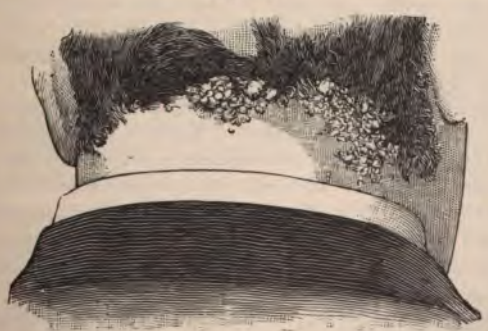
The *treatment* is based upon general principles. Externally soothing applications and those calculated to relieve the itching may be used to advantage. Sulphur ointment has been recommended. Phenacetin has given good results in some instances. Galvanism is also said to be serviceable.

DERMATITIS PAPILLARIS CAPILLITII.

What do you understand by dermatitis papillaris capillitii?

It is a rare affection, and the usual seat of the eruption is on the nape of the neck, the occiput, or vertex, characterized by small pinhead-sized reddish papules that are at first discrete, but afterward become confluent, with interspersed pustules. Keloidal patches finally develop, from which the hair is absent or projects in tufts. The hairs are atrophied, but firmly fixed in their follicles. Papillomatous vegetations, crust-covered and with a foul-smelling secretion, sometimes form, and eventually retract into a sclerotic tissue. The nature of the disease is obscure.

FIG. 10.



Dermatitis Papillaris Capillitii.

DERMATOLYSIS.

What do you understand by dermatolysis?

Dermatolysis consists of a more or less circumscribed hypertrophy of the cutaneous and subcutaneous structures, characterized by softness and looseness of the skin and a tendency to hang in folds. It is very uncommon and of unknown cause.

Describe the appearance of dermatolysis.

The disease may be confined to one portion of the skin or may occur simultaneously in different portions of the body. It occurs most commonly about the side and back of the head, the back, the gluteal region, the arm, and the shoulder. Although the skin is much thickened and appears to be indurated to the touch, the tissues have a peculiar soft feel and roll under the fingers like great masses of fat. The skin hangs in folds and overlapping layers, and presents a somewhat rugous and pigmented surface.

What is the treatment?

Excision when the disease is not too extensive. The galvanocautery is useful when the disease is limited to a small area.

ECTHYMA.

What is ecthyma?

Ecthyma is an inflammation of the skin, consisting of the formation of one or more discrete, flat pustules standing upon an inflammatory base.

Give the symptoms.

The lesions appear as pea- to hazelnut-sized or even larger pustules situated upon a markedly inflammatory and indurated base. The pustules are flat and flaccid and with yellowish contents tinged with blood. The contents dries into brownish or blackish crusts, the removal of which discloses superficial ulcerations covered with a tenacious reddish secretion. Marked pigmentation usually follows. The lesions occur in successive crops, and may continue for an indefinite period. The legs and thighs where the hairs are thickest are the favorite points of attack. They occasion rather a sensation of heat, burning, and pain than itching, the latter being usually more distinct when the lesions are healing under their crusts.

The *prognosis* is favorable. A few weeks usually suffice to effect a cure if the patient follows out the treatment carefully.

Give the etiology.

Ecthyma usually occurs in persons who are badly nourished and uncleanly, and is most frequently met with among the lower classes. The direct cause may be the result of inoculation with micro-organisms, as in furunculosis.

Give its differential diagnosis from—

Eczema pustulosum—by the size, form, and discrete arrangement of its pustules, by the indurated base and areola, the blackish or brownish crust, and the superficial ulceration when the crust is removed.

Impetigo contagiosa—by the same characters, by its distribution and non-contagiousness.

The *flat pustular syphiloderm*—by the absence of the other symptoms of syphilis, by its distribution, and by the superficial character of the ulceration, which in syphilis is deep and has a punched-out appearance and a more profuse secretion.

What is the treatment?

Proper food, cleanliness, and attention to hygiene. Tonics may be prescribed as indicated. Locally, dressing the parts with Lassar's paste will usually suffice. An ointment recommended is—

℞. Hydrarg. ammoniat., gr. xv;
Ung. aq. rosæ,
Ung. zinci oxid., āā. ʒss.—M.

ECZEMA.

What is eczema?

Eczema is a non-contagious, acute, subacute, or chronic inflammation of the skin. It begins as an erythema or as an eruption of papules, vesicles, or pustules, either singly, simultaneously, or in succession. These lesions result in redness, discharge, scaling, crusting, and infiltration of the skin, and are accompanied by more or less intense itching or burning. They leave after complete healing no cicatrices.

What is the most marked characteristic of eczema?

The protean character of its eruption. It may consist of an erythema, vesicles, papules, or pustules, occurring either singly or more or less together, or developing from one primary lesion into another, or it occurs in the form of one of the secondary lesions

resulting from a modification or termination of one of the primary. The varieties of eczema derive their names from the predominant lesion in a given case.

What are the symptoms of erythematous eczema?

The conspicuous symptoms of this form of eczema are redness, heat, and swelling, accompanied by burning, tingling, and itching. It usually begins as one or more ill-defined erythematous and slightly infiltrated patches, accompanied by burning, tingling, and itching. It may be limited or nearly the whole surface may be involved. It may disappear rapidly or else come and go under the influence of various exciting causes, or it may persist for lengthened periods. When it lasts for some time the skin becomes thickened and covered with light scales, and the color will vary from a light-red to a reddish-purple or a leathery hue. The usual situation is the face, but it may also occur in other regions.

It is chronic in its course, either retaining its characteristic form or may through infiltration and thickening with consequent scaling develop into the form known as *eczema squamosum;* or it may vesiculate, the vesicles drying into crusts and falling off, leaving an oozing surface, a form called *eczema rubrum.*

What are the symptoms of papular eczema?

Papular eczema is most apt to occur on the trunk, the arms, and thighs, especially the flexor surfaces. It is characterized by the appearance, usually in large numbers, of red, acuminated, pinhead-sized papules, discrete, each on a reddened base, and scattered irregularly over the surface or else closely grouped. It is usually accompanied by intense itching, and the tops of the papules often appear excoriated by scratching. The papular type may persist throughout the course of an attack, but at other times there will be present abortive papules, vesico-papules, or vesicles. In chronic cases the lesions may run together, forming leathery, scaling patches, the separate papules completely losing their identity (*eczema squamosum*), or if there is much scratching *eczema rubrum* may result.

What are the symptoms of vesicular eczema?

Vesicular eczema usually begins on one or more parts of the body with a feeling of heat and irritation in the part, which shows a diffuse or punctate redness. Numerous closely-crowded pinhead-

sized vesicles rapidly appear, which usually coalesce, forming confluent patches of eruption. They are soon filled with a yellowish gummy fluid, and then they ordinarily break and form a yellowish crust. Sometimes the vesicles simply dry up without breaking. In more marked cases new crops of vesicles continue to come out, and when a considerable surface is involved the quantity of fluid poured out is quite large. In acute cases the process is often attended with considerable swelling and œdema. Papules, papulo-vesicles, and pustules are usually found in conjunction with this form. The two chief characteristics of this form are the itching and the gummy secretion, which leaves a yellow stain on the linen. The usual locations are the face and scalp in infants (commonly known as *milk-crust*, *scalled head*, or *moist tetter*), the neck, flexor surfaces, and fingers.

What are the symptoms of pustular eczema?

Pustular eczema is very similar in its original appearance to vesicular eczema, except that the lesions appear as pustules instead of as vesicles, and there are usually less heat and itching. Occasionally the pustular and vesicular forms coexist in the same subject, the eruption beginning with vesicles, which later become pustules.

The scalp and face are favorite seats of pustular eczema, and it is apt to occur in badly-nourished children. The same causes which produce vesicular eczema in a healthy individual will develop a pustular form in a poorly-nourished or tuberculous person.

What are the symptoms of squamous eczema?

Squamous eczema is an important clinical variety which usually follows the erythematous or papular forms of the disease. It occurs usually in patches which are red, infiltrated, and thickened and covered with large and small scales. The elasticity of the skin is often impaired by excessive infiltration, and about the joints or at the angles of the mouth fissures may form in consequence. Itching may be present to a greater or less degree. The disease is often met with on the scalp or the back of the neck and on the face. Mild grades of squamous eczema were formerly called *pityriasis simplex*.

What are the symptoms of eczema rubrum?

The characteristic appearance of eczema rubrum is a red, raw,

inflamed surface, infiltrated or swollen, from which the serum exudes in great quantities. It is due to the shedding of the upper layers of the epithelium and exposure of the rete. The exudation sometimes dries, forming yellowish or brownish crusts, which, unless artificially detached, continue to adhere, the process of exudation meanwhile going on underneath. Upon removal of the crust, the red, raw, oozing surface (*eczema madidans*) is seen. The subjective symptoms are itching and burning varying in severity. This variety usually develops from the vesicular or pustular type, and is frequently observed about the head in children and on the lower extremities in adults, being most commonly seen in those of advanced years.

What are the symptoms of fissured eczema?

The noticeable features of eczema fissum are the cracks and fissures, which are due to the loss of elasticity of the skin in consequence of eczematous infiltration. It occurs about the joints, in the angles of the mouth, and about the anus as a sequence of erythematous or squamous eczema. It is frequent among bartenders, from the constant wetting of the hands, among truck-drivers and others whose occupations expose them to the inclemencies of the weather.

What are the symptoms of eczema sclerosum?

In this variety the skin is infiltrated, very much thickened, and inelastic, suggesting the condition of tanned leather. It is usually seated upon the palmar and plantar surfaces, and is often preceded by the papular or squamous type.

What are the symptoms of eczema verrucosum?

This wart-like form is occasionally observed, especially upon the lower extremities, in elderly people as the result of long-continued disease. The skin becomes thickened, and so hypertrophied as to suggest the appearance of warts closely packed together in a circumscribed patch.

What are the subjective symptoms of eczema in general?

Eczema is *the* itching disease *par excellence*. The degree of *pruritus* will vary according to the age of the patient, the extent and location of the disease, and the character of the predominant lesion. Papular eczema is the most, and pustular eczema the least, annoying in this regard. Sensations of burning or a feeling of rawness may sometimes be present.

Eczema is divided, according to the degree of inflammation, into acute, subacute, or chronic eczema.

Describe the acute form.

The acute form of eczema may be ushered in with some slight degree of constitutional disturbance, but often no such disturbance is present. The local symptoms, however, exhibit the usual signs of inflammation—viz. burning, tingling, or itching, with redness, heat, and swelling—to be followed by some one or several of the forms of disease already described.

Describe the subacute form.

The subacute form begins more insidiously, and is subacute from the beginning. The pruritus and infiltration are moderate in degree, but at any time the more acute process may supervene.

Describe the chronic form.

The symptoms are largely those of the subacute variety, in which form it usually begins. The infiltration is greater, the itchiness more marked, and there is greater scaliness. This form may last for years.

What is the course of eczema?

Eczema is, generally speaking, a tedious, troublesome disease, rarely terminating spontaneously. Its tendency to relapse is one of its marked characteristics. The seasons have a decided influence in its development, it being much more frequent, and with few exceptions much more severe, during the winter months.

What is the etiology of eczema?

In persons who suffer from eczema a predisposition usually exists which renders the skin very susceptible to an eczematous inflammation when exposed to the action of external irritants. Underlying this predisposition are constitutional conditions which doubtless favor it. These are conditions of mal-assimilation due to gastro-intestinal derangement, nervous exhaustion, the tuberculous state, and the gouty and rheumatic diathesis. All forms of external irritants may set up an eczema in such a constitution. The most frequent are heat and cold, excessive use of water, strong soaps, dyes, chemicals and the like. It is not hereditary in the sense that syphilis is, but it is common to find that the children of eczematous parents have inherited the predisposing and susceptible skin and are prone to attacks of eczema.

What is the pathology of eczema?

Eczema is an inflammatory disease, beginning as a hyperæmia in the mucous layer of the epidermis, which is soon followed by exudation, the degree of hyperæmia and exudation varying in proportion to the acuteness or chronicity of the attack. In cases which are severe the infiltration may involve the entire corium, and may also extend to the subcutaneous cellular tissue. In addition, there may be pigment-deposits in the mucous layer and in the corium, and in long-continued inflammation the fat-cells disappear, the connective tissue becomes hardened, and the follicles and glands may be destroyed. The eruption is held to be of nervous origin, in which both rete-cells and vessels play an important and somewhat independent part in obedience to nerve-paresis.

Name the different diseases with which eczema may be confounded, and describe the diagnostic differences.

Acne rosacea somewhat resembles erythematous eczema, but the presence of acne pustules, the absence of itching and heat, and, later, the development of telangiectasis, will serve to distinguish it from the latter affection.

Erysipelas.—This disease is often confounded with erythematous eczema. Erysipelas is a constitutional disease, accompanied by fever and systemic disturbance; eczema is non-febrile, and is not accompanied by systemic reaction. Erysipelas begins at one point and extends peripherally; eczema invades the region affected at once. Erysipelas has a shiny, tense skin, with œdema and a sharp line of demarcation between the sound and affected skin; the skin in eczema is not shiny, is somewhat scaly, with some infiltration, but no œdema, and fades gradually into the sound skin. In erysipelas the subjective symptoms are heat and burning, rather than itching, as in eczema. In erysipelas there is no discharge except from blebs; eczema is often moist and oozing. Erysipelas runs an acute and short course; eczema is persistent and may become chronic.

Herpes Zoster.—The eruption consists of large vesicles, grouped, that follow the course of a cutaneous nerve. The eruption is preceded and accompanied by severe pain of a neuralgic character. In eczema, on the other hand, the vesicles are smaller, rupture easily, have no special grouping, and do not follow a nerve-tract: the subjective symptoms are those of itching.

Urticaria, occurring in the form of small papules (*lichen urticatus*),

resembles the papular form of eczema. The eruption of urticaria appears suddenly, and lasts but a few hours; is unaccompanied by other forms of eruption elsewhere; the skin is irritable, and welts form immediately upon scratching the skin; while papular eczema comes out more gradually, the eruption being persistent, and is usually accompanied by other forms of eczema; the skin is not especially irritable. The subjective symptoms of urticaria are itching, tingling, and pricking, and are aggravated by currents of cold air, undressing, etc.; in eczema the itching is intense, not so much tingling and pricking, and it is not especially aggravated by cold air, etc.

Pityriasis Capitis differs from squamous eczema in its being limited to the scalp: it is always a dry disease; the skin is not thickened nor inflamed; the scales are easily detached, and frequently more or less baldness ensues after a time. Squamous eczema of the scalp often extends to the ears; the skin is inflamed and more or less infiltrated; the scales are more firmly adherent, and the loss of hair is less frequent; the hair usually returns after the eczema is cured.

Psoriasis.—The eruption of psoriasis is symmetrically distributed, and is usually scattered over the entire surface. The lesions consist of variously-sized, sharply-defined patches, which are covered with dry, silvery-white, shiny scales which are easily removed, and then disclose one or more fine bleeding points. The eruption has a predilection for parts that are subjected to unusual pressure or friction. The subjective symptoms are slight and rarely exist. Eczema, on the other hand, is rarely symmetrical except upon the palms and soles, is usually localized, occurs in large, irregular patches which merge into the healthy skin, and shows no predilection for certain parts. Itching is usually present, and is often severe.

Lichen Planus.—The papules of lichen planus have a peculiar squarish or angular outline, are flat with a slight central depression, and remain as papules throughout the course of the disease. Even when aggregated to form patches they retain their individuality. They are usually slightly scaly and of a dull-red or violaceous color, and leave behind a characteristic pigmentation. The papules of eczema, on the contrary, are rounded and more or less acuminate, and may undergo various modifications. The papules often unite to form patches, losing their identity; they are of a bright red, and do not leave behind any pigmentation. Itching is present in

both affections, but is usually much more severe in papular eczema.

Ringworm.—Ringworm of the body (*trichophytosis corporis*) and ringworm of the beard (*trichophytosis barbæ*) are the forms most likely to be confounded with eczema. It may be distinguished by its circular form, its well-defined and raised margin, with its "clearing up" in the centre, and the presence of mycelium when examined under the microscope.

Sycosis.—This affection is limited to the beard: the inflammation is always follicular, the pustules being invariably punctured by a hair, and itching is rarely present. Eczema is diffuse, and usually extends beyond the limits of the beard, attacking non-hairy portions of the face; the lesions are not always perforated by hairs, and the itching is very marked.

Favus may be confounded with pustular eczema. The lesions are covered with dry and powdery canary-colored, cup-shaped crusts, with a characteristic mouse-like odor. The hairs are dry, brittle, and wiry, and the eruption leaves behind scars, with permanent loss of hair. The peculiar vegetable parasite is found under the microscope. In pustular eczema the crusts are soft and the exudation is purulent; there is no peculiar odor. The hairs appear normal, and there is no subsequent scarring or permanent loss of hair.

Scabies.—The eruption of scabies is very much like that of eczema, and frequently the two coexist. For purposes of treatment, however, it is necessary to diagnosticate the primary cause. The lesions of scabies are found especially between the fingers, on the flexor aspect of the wrists, anterior folds of the axillæ, about the nipples, and on the shaft and head of the penis; it never occurs on the face or head. Itching is intense, especially at night; patches do not occur. Contagion is generally ascertained in the history. Finding the parasite with its burrows is conclusive, but not always possible. The lesions of eczema have no special seat of election. Patches do occur; itching is not so severe; there is no history of contagion, and the scalp and face may be affected.

Syphiloderma. The *macular syphilide* may resemble erythematous eczema; the lesions, however, are small and the eruption is general; the color is coppery or that of lean ham; there is no scaling or infiltration, but usually pigmentation; other symptoms of syphilis may be present. In erythematous eczema the lesions are large and the eruption is localized; the color is bright red; there

is some scaling and infiltration, but no pigmentation; itching is marked.

The *papular syphilide* may be distinguished from papular eczema by the extent of the eruption; the firm, deep-seated character of the papule, feeling like a lump of flesh in the skin; the discrete form of the eruption, there being no tendency to group or form patches; and absence of itching.

The *squamous syphilide* is most likely to be mistaken for *squamous eczema*. The former is usually unilateral; the patches are circular or semicircular in form, with sharply-defined and elevated margin, and a tendency to heal in the centre. Patches of eczema, however, are usually symmetrical, are irregular in outline, fade gradually into the sound skin, and tend to heal at the edges.

What is the prognosis of eczema?

The *prognosis* of eczema, so far as curing an attack is concerned, is usually good. The tendency to relapse in a person predisposed to this condition when subjected to an exciting cause must be borne in mind when giving an opinion. The length of time required to effect a cure will depend upon the acuteness or chronicity of the attack and the extent of the changes in the skin that have taken place.

Does eczema leave the skin in a normal condition?

Usually it does, though in long-protracted cases, especially in chronic eczema of the legs, some pigmentation may follow. Scarring is exceedingly rare.

What is the treatment of eczema?

In most cases both constitutional and local measures must be employed. In some cases, however, as where the eruption is local and due to some external irritant, or where it is exceedingly limited in extent, external treatment alone will give satisfactory results.

What are the constitutional measures employed?

In all cases strictest attention to hygiene and diet must be observed. Fresh air, moderate exercise, regular habits, and a plain and nutritious diet are strongly indicated, as well as abstention from all articles of food that are not easily digested. Coffee, tea, and alcoholic stimulants, particularly wine and beer, should also be avoided.

What [illegible] in the constitutional treatment?

[illegible] specific influence on [illegible] upon the indica- [illegible] it is well always [illegible] and this may be [illegible] will secure a regular [illegible] should be kept freely [illegible] various laxatives may be [illegible] are the simplest and [illegible] the condition. In infants [illegible] forms of [illegible] may be giv- [illegible] results. [illegible] diet and the [illegible] these the [illegible] and the various [illegible] important to give the [illegible] will not only prove [illegible] the patient [illegible] of hot water. [illegible] the [illegible] of water [illegible] children will [illegible] individuals [illegible] arsenic. [illegible] the alkalies. [illegible] good results. [illegible]

What is the effect of arsenic in eczema?

[illegible] a specific [illegible] anything [illegible] that in a [illegible] variety. [illegible] acute [illegible] where the inflammation is marked it will [illegible] positive harm.

What is the object sought in external medication?

To allay the inflammation in acute and subacute cases, and to

stimulate the skin and hasten absorption in chronic cases and where there is infiltration. Success in the treatment of eczema depends upon a correct appreciation of the degree of inflammation present, and upon the judgment used in the selection of a soothing or a stimulating plan of treatment in a given case.

Name some of the applications used in acute cases.

Our object in these cases is to allay the inflammation present and to protect the diseased parts from the action of external irritants.

When the process is very acute the following lotions will be found of great service:

℞. Tr. opii,
Liq. plumbi subacetatis, āā. ʒij;
Aquæ, ʒiv.—M.
Sig. To be applied on lint.

℞. Calamin.,
Zinci oxid., āā. ʒij;
Glycerin., ʒj;
Aq. calcis,
Aquæ, āā. ʒiij.—M.
Sig. Mop on the part with a soft sponge and allow it to dry.

℞. Liq. plumbi subacetatis, ʒij;
Tinct. opii, ʒij;
Tinct. camphor., ʒj;
Glycerin., ʒij.—M.
Sig. To be mixed with a quart of water and applied on lint.

Black wash may be used alone or together with zinc-oxide ointment, the wash being first applied and allowed to dry, and then the parts smeared with the ointment. When there is much itching present, solution of creolin, 2 to 4 per cent., mopped on or applied on lint. This is especially useful in eczema rubrum, as is also solution of carbolic acid, 1 to 3 per cent. Dusting powders are of service when the process is very extensive as protectives, as aids in drying the parts, and in protecting the surfaces when the affection occurs on opposed areas. Of these may be mentioned starch, lycopodium, Venetian talc, oxide of zinc.

℞. Pulv. amyli, ℥vj;
Zinci oxid., ℥iss;
Pulv. camphor., ℥ss.—M.

℞. Thymol, gr. j;
Pulv. zinci oleat., ℥j.—M.

The stearate of zinc is a new remedy which has been highly recommended. It is too stimulating, however, for acute cases.

The following ointments will be found very useful as protectives:

℞. Unguent. zinc. oxid.
Sig. Apply on lint.

℞. Acid. salicyl., gr. xv;
Bismuth. subnit.,
Zinci oxid., āā. ℥ij;
Vaseline, ℥j.—M.
Sig. Apply on lint.

Lassar's paste is one of the best, and is made as follows:

℞. Acid. salicyl., gr. xv;
Amyli,
Zinci oxid., āā. ℥ij;
Vaseline, ℥j.—M.

In acute eczema of the head and face, so frequently seen in children, this ointment is of especial value. It should be thickly spread upon lint, which, after openings for the eyes and mouth have been cut, is firmly fixed upon the head and face with a gauze bandage. This not only serves to keep the ointment in constant contact with the diseased parts, but also prevents the little patient from rubbing or scratching the skin. The dressings may be changed every second or third day.

Name some of the remedies useful in subacute cases.

Ointments are usually of greater service in these cases than either lotions or powders. Any of the foregoing, which are employed in acute cases, may be used, but more stimulating applications will be found of greater value. The following are a few to be recom-

mended: Zinc-oxide ointment, with 2 to 5 per cent. oil of cade added; diachylon ointment, with 3 to 10 per cent. salicylic acid added; Lassar's paste as used in acute eczema, with 3 to 5 per cent. oil of cade added.

℞. Hydrarg. ammoniat., gr. x–xxx;
Acid. carbolic., gr. v;
Ung. zinci oxid., ℥j.—M.
Sig. Rub into the part.

℞. Ung. picis liquidæ, ℥ij;
Ung. aquæ rosæ, ℥vj;
Zinci oxid., ℥ss.—M.
Sig. Spread on lint.

The lead plasters, containing varying strengths of salicylic acid, manufactured by Seabury & Johnson, are a clean and excellent dressing in these cases.

Name some of the applications useful in sluggish cases.

In this type of eczema stimulating applications are for the most part called for. The following are among the most valuable: The various tar oils, alone, in ointment, or with alcohol, as a lotion; salicylic acid, 2 to 10 per cent., in ointment, plaster, or oil; resorcin, 3 to 10 per cent., in ointment or oil.

A lotion containing both salicylic acid and tar, as in the following, is an excellent application:

℞. Acidi salicyl., ℥j;
Ol. ricini, ℥ss;
Ol. cadini, ℥j;
Alcohol., ℥iv.—M.
Sig. Rub thoroughly into the part.

℞. Potass. caustic., ℥j;
Picis liquidæ, ℥ij;
Aquæ, ℥v.—M.
Sig. To be used as a lotion in the strength of 1 to 4 drachms to the pint of water, or in full strength for thick, horny patches.

Rubber dam, such as is used by dentists, is of value in these thickened conditions. It should be laid over the affected part, ar

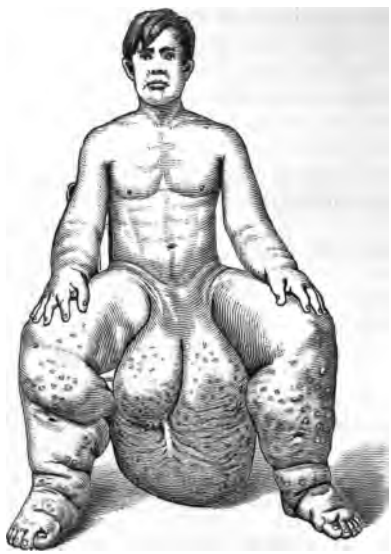
secured in place by means of a roller bandage. In hard and leathery patches it is wise to first scrub the parts thoroughly with sapo viridis and hot water until the skin is somewhat tender, and then apply any of the foregoing applications. The use of soaps and water in acute and subacute cases, however, should be strongly interdicted, as it is always irritating and tends to aggravate the trouble. Where cleansing of the parts is necessary, sweet oil will, in the majority of cases, answer the purpose, and should always be chosen in preference.

ELEPHANTIASIS.

What is elephantiasis?

Elephantiasis, sometimes called lepra Arabum, elephantiasis Arabum, and Barbadoes leg, is a chronic disease of the skin and subcutaneous tissue. It is usually limited to a certain region, and begins as an inflammatory condition of the blood and lymphatic

FIG. 11.



Elephantiasis Scroti.

FIG. 12.

Elephantiasis of the Foot and Leg

vessels, and results in an hypertrophy of the entire integument of the part, with œdema, pigmentation, papillary growths, and great deformity.

Describe the course of the disease.

The disease usually begins with a febrile attack of more or less severity, with an erysipelas-like inflammation of the affected part, and lymphangitis. The part is swollen and œdematous, and pits on pressure. This condition subsides after a short period, but leaves the affected area somewhat swollen and enlarged. Similar attacks occur subsequently from time to time, and with each successive attack the enlargement becomes greater, the skin becomes harder, and does not pit upon pressure, but has a firm and brawny feel to the touch; the natural folds of the skin become obliterated; papillomatous growths develop; the skin is darkened with increased pigmentary deposits; and great deformity ensues. At times superficial ulceration takes place, with discharge and crusting that are not unlike an eczematous inflammation. Its most frequent seat is the lower extremity of one side. The penis and scrotum in the male and the labia in the female are also favorite seats for this affection.

What are the subjective symptoms?

During an attack there is often considerable pain, though slight in proportion to the apparent severity of the disease.

febrile condition during an exacerbation is often attended with corresponding malaise. The greatest discomfort arises from the great weight and tension due to the excessive hypertrophy.

What is the etiology of elephantiasis?

Elephantiasis is due to occlusion of the lymphatics, the result of inflammation or as arising from mechanical causes. It occurs most frequently in the tropics, and in the countries where it is endemic it is known to be caused by the presence in the lymph-vessels of the filaria sanguinis hominis (microscopic thread-worms). In this country it may be induced by repeated attacks of erysipelas, chronic eczema of the legs, etc. Hardaway speaks of a case occurring in a lady who had been confined to her chair many years by rheumatism.

What is the pathology?

The process begins as an inflammation of the blood- and lymph-vessels, with consequent occlusion, resulting in œdema and an hypertrophy of all parts of the skin and subcutaneous tissue. The subcutaneous tissue is relatively more enlarged than the epidermis and derma. Subsequently atrophy of the glands, blood-vessels, and even muscles, may result.

What is the prognosis?

The *prognosis* of elephantiasis, once fully developed, is unfavorable as regards perfect cure. In the earlier stages of the disease much can be done to arrest its progress.

What are the diagnostic features of elephantiasis?

When fully developed the disease is easily recognizable. Repeated attacks of erysipelatous inflammation affecting a part should excite suspicion.

What is the treatment?

In the acute stage to relieve the inflammation the usual remedies may be resorted to, together with rest and an elevated position of the parts. Between the attacks the application of blisters and inunction with iodine and mercurial salves have been recommended. Galvanism is also useful. The application of the rubber bandage is useful. It should be firmly applied, and a thin stocking interposed between the rubber and skin. Ligature of the main artery of the limb, as well as excision of a portion of the sciatic nerve, is said to have given good results. In elephantiasis of the

genitalia amputation is indicated. Superadded eczema or ulceration is treated on general principles.

EPITHELIOMA.

Synonyms.—Skin cancer; Epithelial cancer; Carcinoma epitheliale.

What are the three varieties of epithelioma met with?

The superficial, the deep-seated, and the papillomatous.

Describe the superficial variety of epithelioma.

The superficial variety (rodent ulcer) usually begins as a firm reddish or yellowish, waxy-looking papule, varying in size from a pin-head to a split pea, occurring either singly or in an aggregate of several. It may also begin from a wart, a mole, or from the localized seborrhœal spots seen on the faces of elderly people. After some time, as a result of scratching or picking, a superficial excoriation appears, which is covered with a slight yellowish or brownish crust. The ultimate result is the formation of an ulcer, which gradually increases in size, though it may remain stationary for long periods of time. In the process of development new foci of disease continue to appear about the edges of the ulcer in the form of tubercles, which in turn break down and ulcerate. The ulcer has an irregular outline, an uneven surface, which is covered with a viscid secretion, giving to it a glazed appearance, or drying to form a firm, adherent crust. The border, which is hard, indurated, and waxy-looking, is sharply defined against the healthy tissue, and has coursing over it a few small fine blood-vessels. Occasionally the ulcer heals at different points, and small cicatrices will be found. The lymphatic glands are not affected, and the general health remains good even after extensive destruction of tissue has taken place. Pain, if it exists at all, is very slight. The usual site for the superficial epitheliomata is the upper part of the face, though they may occur elsewhere.

Describe the deep-seated variety of epithelioma.

The deep-seated variety of epithelioma begins in the form of a small nodosity, which is seated in the skin and subcutaneous tissue, or it may originate in the manner already described. It is reddish or purplish in color, surrounded by an areola, and is firm and hard, and is accompanied by infiltration of the surrounding tissues. The

ultimate outcome of this process is ulceration, though months and years may elapse before this stage is reached. The ulcer varies considerably in size and shape: it has an uneven surface, which bleeds freely on being touched, and secretes an offensive viscid fluid. The edges are everted and hardened, and of a purplish or livid color. The ulcer increases both in size and in depth, and extends down through muscle, cartilage, and bone. The infiltrating epithelioma is painful almost from the inception, and as ulceration progresses the sharp lancinating pain increases in severity. Sooner or later the lymphatic glands become implicated, and the cancerous cachexia is established. The patient dies from marasmus, exhaustion, or hemorrhage.

Describe the papillary variety of epithelioma.

The papillary variety of epithelioma may develop from a wart or have its origin in one of the preceding forms. It may possess a hard base or else spread out from a narrow neck, and in some cases looks not unlike a cauliflower excrescence. From the fissures between the papillæ issues an offensive sanguinolent discharge. The tissues finally break down, an ulcer forms, and the disease takes on a malignant character, following the usual course.

Upon what parts is epithelioma usually developed?

It may develop upon any part, but shows a predilection for the nose, lips, and genitalia.

At what age is epithelioma observed?

It is usually seen in middle-aged or elderly persons, seldom in the young. The majority of cases first appear between the fiftieth and sixtieth years. It is more common in men than in women.

What are the causes of epithelioma?

The *causes* are hard to determine. Only about 5 per cent. can be attributed to heredity. Local irritation is a factor of great importance, as is seen in cancer on the lip of inveterate pipe-smokers, and as following burns, wounds, and ulcers, and as developing upon lupous and syphilitic ulcerations.

What is the pathology?

Epithelioma consists of an abnormal activity of growth and condition of the epithelium itself. It is characterized by an infiltration downward, in the form of columns, of epithelial cells

from the rete: these are so abundant that the products of the resultant secondary inflammation choke them at one point or another, so that separation occurs and the isolated part becomes a brood-nest for one or several cancer colonies. The irritation progressing with this proliferation of the epithelium, the corium is infiltrated with round cells, the connective-tissue corpuscles multiply, the vessels dilate, and the cells constituting their walls proceed to further development.

What is the prognosis in epithelioma?

The *prognosis* depends upon the variety and the extent of the disease. In the superficial form it is usually good, and recurrence after removal infrequent. The deep-seated variety is always more serious and the prognosis less favorable. The more abundant the connective tissue present in a cancerous growth in proportion to the amount of epithelium contained in its alveoli, the more favorable the prognosis.

With what diseases may epithelioma be confounded?

Lupus vulgaris, the ulcerating syphilide, and verrucæ.

How do these differ from epithelioma?

In lupus vulgaris the tubercles have a characteristic apple-jelly-like color, and never occur singly; the ulceration is superficial, and begins at different points; the edges of the ulcer are flat, and not indurated; scarring is constant; and the disease usually begins in childhood. Warty growths begin at any age; there is no infiltration about them, and they do not break down or tend to ulcerate.

The ulcerating syphilide is more rapid in its progress; the ulcer has flat or clean-cut edges; there may be a tendency to heal in the centre while spreading at the periphery; there may be nodules about the edges of the ulceration. Internal treatment is often curative.

What is the treatment of epithelioma?

The *treatment* consists in removal of the diseased tissue. This may be accomplished in various ways.

The best method is by means of the dermal curette. The diseased tissue is thoroughly scraped out, after which a 33 per cent. plaster or ointment of pyrogallic acid is applied for two or three days to get rid of any remaining diseased tissue; after this the surface is healed under a mercurial plaster. Excision by the knife

may be practised when the disease is extensive. Various chemical caustics may also be used, as caustic potash, lactic acid, arsenic, etc.

EQUINIA.

Synonyms.—Farcy; Glanders.

What is equinia?

It is a contagious, specific disease of rare occurrence and of an undoubted malignancy, appearing in man usually as a result of inoculation from the horse or ass, and characterized by general and local symptoms of a grave character.

What is the clinical course of equinia?

The acute disease is ushered in by malaise and pain of a rheumatic character in the joints and limbs. As the pains increase fever of an intermittent or continued type appears. If the specific agent has gained entrance through the cutaneous surface, local pain is experienced, together with erysipelas-like redness of the part. An ulcer forms and the contiguous lymphatics become involved. Meanwhile, the ulcer enlarges, discharges an offensive pus, and takes on a chancroidal aspect. Later on erythematous spots come out on the skin, which become converted into pustules about the size of a pea, which burst and pour out an offensive sanguino-purulent discharge, or large projecting tumors and abscesses may develop: these are at first hard and painful, but subsequently become doughy and break down into extensive corroding ulcers that penetrate the tissues and expose the muscles and tendons. In addition to lymphatic involvement at the site of inoculation, the vessels and glands in other parts of the body become implicated and produce ulceration. The cutaneous phenomena may develop in twenty-four hours or may not appear for two weeks, being preceded by a nasal discharge and certain ill-defined general and local symptoms. When the nose is affected swelling of the organ supervenes, accompanied by marked pain and discharge, which soon becomes purulent, bloody, and of a disagreeable odor. Pustules and ulcers form on the mucous surface, and in malignant cases erosion and perforation of the bone may ensue. Catarrhal, inflammatory, and ulcerative processes also take place on other mucous membranes, as the eye, mouth, fauces, and the entire respiratory tract. In malignant cases the patient succumbs in a few days, or he may live on for several weeks, finally dying of

collapse. In chronic glanders the type is much less severe and the nose is seldom affected. In this form about half the cases ultimately recover, the disease lasting from a few months to several years.

What is the etiology?

The disease is due to inoculation by a specific micro-organism which resembles the tubercle bacillus, and which has been successfully demonstrated (bacillus mallei).

What is the treatment?

After immediate and complete destruction of the inoculated surface, when such exists, treatment, both local and constitutional, should be based on general principles.

ERYSIPELAS.

What is erysipelas?

Erysipelas is an acute inflammatory disease of specific origin, which is distinguished by a sharply-defined area of intensely inflamed skin, upon which at time vesicles may develop. It is accompanied by febrile disturbances and followed by desquamation.

What are the symptoms of erysipelas?

An attack usually begins with a pronounced chill, followed by fever and more or less constitutional disturbance. The local manifestations generally commence at a given point, from which the disease progresses. The initial spot is of a rosy-red color, and this usually enlarges and creeps forward on the skin, with a border that is sharply defined against the healthy tissue and appreciably elevated. The affected surface is swollen, hard to the touch, and presents a tense and shining appearance: the rosy redness is replaced after a while by a duskier hue, which may in severe cases become livid. If the inflammation is very active, vesicles and blebs form over the patch. Occasionally the deeper parts become seriously involved, suppuration and even sloughing taking place. Erysipelas usually lasts a week or ten days, and is accompanied throughout its course by more or less constitutional disturbance. The fading of the eruption begins in the centre, the peripheral extending portion maintaining its integrity until the last, when it too fades away. The subsidence of the process is followed by desquamation.

What parts are most commonly affected?

Aside from those cases which are strictly surgical, it occurs most frequently upon the face, where it may be seen upon the nose, the lips, or the eyelids, usually beginning where the mucous membrane and skin meet, and gradually spreading over the face.

What is erysipelas ambulans?

A variety of the disease in which the erysipelatous inflammation extends rapidly to neighboring parts, at the same time disappearing from the part primarily affected, or it may disappear completely to recur in an entirely new location (erysipelas metastaticum).

What is the etiology of erysipelas?

It is due to the action of a specific microbe. Various conditions of vitiated health, as Bright's disease, intemperance, and bad hygienic surroundings, are predisposing causes.

What is the prognosis?

The *prognosis* of cutaneous erysipelas is generally good, the disease running its course in two or three weeks. In some instances, in broken-down subjects, the disease may prove fatal. Erysipelas of the head and neck may prove dangerous from cerebral complications or implication of the mucous surfaces.

What is the diagnosis of erysipelas?

The *diagnosis* of erysipelas is comparatively easy. The sharply-defined area of intensely inflamed skin is characteristic. The fever serves to distinguish it from eczema, which it most closely resembles.

What is the treatment?

The *treatment* may be inaugurated with a saline purge, followed by the administration of iron and quinine. The tincture of the chloride of iron in from 20 to 30 drops, repeated every three or four hours, is the favorite preparation. Stimulants should be used, if necessary, to keep up the strength. Locally protection of the parts with a powder, the application of lead-and-opium wash, or of a saturated solution of boric acid, or painting the parts with flexible collodion, will be found of service. Painting the border of the patch with tincture of iodine or a strong solution of nitrate of silver to limit its spreading is often practised, but it is of very doubtful utility. An ointment of ichthyol, from 10 per cent. to full strength, is said to give excellent results.

ERYSIPELOID.

What is erysipeloid?

It is a disease due to infection of a wound with foul animal matter, and is often found upon the hands of butchers, dealers in fish, cooks, and tanners.

What is the clinical appearance and course?

It begins as a red spot which gradually extends over the surface and is attended by more or less itching. As it progresses at the periphery the central portion undergoes involution and rings and half circles are formed. The lesion is slightly elevated, and has a well-defined border. There is no constitutional disturbance, and it tends to spontaneous recovery in one or two weeks.

From what diseases is it to be distinguished?

From erysipelas, ringworm, and erythema annulare.

What is the treatment?

The application of diachylon ointment, to which has been added 15 to 20 per cent. of ichthyol, is most useful. Simple dressing with any mild protective is usually sufficient.

ERYTHEMA SIMPLEX.

What is erythema simplex?

Erythema simplex is a simple redness of the skin which is unattended by any structural change or even elevation of the surface. It occurs in variously sized and shaped patches, according to the degree of hyperæmia present, which temporarily fade under pressure. It may be diffused or circumscribed, idiopathic or symptomatic.

What do you understand by idiopathic erythema?

Those forms of erythema which are produced by the action of external agencies.

Name the varieties of idiopathic erythema.

Erythema Traumaticum.—This variety is due to friction, pressure, scratching, or any other traumatism. If the cause is long continued the process is readily converted into a dermatitis; this is equally true of all the varieties.

Erythema Caloricum.—This variety is caused by the action of either extreme heat or cold. It is most commonly seen in "sun-

[illegible] maceration of the epidermis and erosion [illegible]

What are the symptoms of erythema intertrigo?

The surfaces of the opposed parts become hyperæmic and reddened, giving rise to a feeling of soreness and irritation. The increased heat of the parts stimulates the secretion of sweat, which macerates the epidermis, and on decomposing increases the irritation. A muciform discharge is often present, which frequently emits an offensive odor. Under circumstances of neglect the surfaces may become fissured, raw, and even extremely ulcerated.

What is the course of erythema intertrigo?

In infants it may appear suddenly, and under proper management last but a few hours; on the other hand, if neglected or improperly treated, it may persist for weeks.

What is the cause of erythema intertrigo?

Intertrigo is found chiefly in the folds of the skin in children and fat people, and occurs most frequently in hot weather. It is due to the contact of opposing surfaces, giving rise to increased heat and moisture of the parts. It is aggravated by uncleanliness and by the contact with the skin of acrid discharges, as is seen on the nates of children when the napkin is not frequently changed, or on the genitalia of women from menstrual or other discharges.

What is the treatment?

Cleanliness must be insisted upon, but too frequent washing must be interdicted. Contact of the opposing surfaces must be prevented by dusting powders or by interposing pledgets of absorbent cotton. Covering the surfaces with Lassar's paste is one of the very best methods of cure. The parts should be kept constantly covered, and when practicable should be bandaged with lint. Various mild astringent applications may be employed.

What is erythema multiforme?

Erythema multiforme is an exudative disease of the skin which is characterized by the appearance of discrete or aggregated macules, papules, tubercles, or nodules, and is accompanied by more or less constitutional disturbance.

What are the symptoms?

The eruption of erythema multiforme is generally symmetrical, and occurs principally upon the arms, legs, backs of the hands, and dorsum of the feet. In the beginning it consists of small pin-head-

sized erythematous spots, which, as the process becomes more intense, develop into papules, tubercles, nodules, or large irregular patches. The lesions are at first pinkish in color, but become red, dark red, or even violaceous. When the exudative process is severe the coloring matter of the blood escapes into the tissues, giving to the lesion the varying shades of an ecchymosis. The eruption is often preceded by more or less constitutional disturbance, consisting of sore throat, rheumatoid pains, malaise, and fever. There may be present any one of the various lesions described above, or the eruption may consist of mixed lesions. The various shades, forms, and shapes of the lesions have given rise to several names by which the special configuration is designated.

What are the names given?

Erythema Annulare, when the patch fades in the centre and extends at the border to form a ring.

Erythema Iris, when the lesion consists of concentric rings, one forming within the other, giving rise to a variety of shades and colors.

Erythema Gyratum, when advancing rings meet others and become broken into gyrate lines.

Erythema Marginatum, when the patch is more or less elevated, with a sharply-defined margin.

Erythema Papulatum, when the papular lesion predominates.

Erythema Tuberculatum, when the eruption consists principally of tubercles.

Erythema Vesiculosum and *Bullosum*, when the exudative process is so severe that vesicles and bullæ develop upon pre-existing lesions. This form is quite rare.

What is herpes iris?

Although usually described as a distinct disease, herpes iris is really a peculiar form of the vesicular type of erythema multiforme. The eruptive patch makes its appearance as a vesicular lesion on an erythematous base; the central vesicle increases in size, and at its periphery presents an extending red areola, which in turn is elevated by fresh effusion into an annular ring; the original vesicle in the mean time undergoes absorption and leaves in its place a peripheral discoloration. The process may end here, or else other concentric rings, vesicular or erythematous, may continue to form. The various shades of color thus produced give to it its name

herpes iris. The usual seat is on the backs of the hands and feet, though it may occur elsewhere. Its course and general characteristics do not differ from the usual type of erythema vesiculosum.

What are the causes of erythema multiforme?

The *causes* are unknown. The disease is more frequent in the spring and fall, is seen usually in the young, often occurs in persons suffering from rheumatism, and is frequently observed in recently-landed immigrants, particularly in females.

What is the pathology?

It is an acute disorder, doubtless of vaso-motor origin, and consists of a hyperæmia which may advance to inflammation and exudation limited to the corium and subcutaneous tissue.

What are the distinguishing features of erythema multiforme?

The multiformity of the lesions, their location, size, and varied configuration, and the mildness of the subjective symptoms in proportion to the apparent gravity of the eruption. From urticaria erythema multiforme may be distinguished by the transient character of the eruption in the former, its occurrence upon the trunk, the lighter color of the patches, and the intense itching; from eczema papulosum by the chronicity of the latter, the intense itching, and the size and shape of the papules.

What is the prognosis?

Always good. With appropriate treatment the disease may be cured in a few days, though in susceptible individuals relapses may occur.

What is the treatment?

The underlying cause, if known, should be treated on general principles: regulation of the diet and habits and the exhibition of laxatives when constipation exists. It is doubtful if the course of the disease is influenced by drugs, though phenacetin and antipyrine may prove serviceable. When the itching is annoying, cooling lotions of alcohol and water, vinegar and water, or bicarbonate of soda and water may be employed.

Define erythema nodosum, and describe its symptoms.

Erythema nodosum is an acute exudative disease, distinguished by the formation of pea- to egg-sized erythematous nodes. The skin manifestations are usually preceded by more or less malaise,

sore throat, rheumatic pain about the joints, and fever. After a day or two small erythematous nodes make their appearance over the anterior aspect of the legs, rarely extending above the knees, but occasionally appearing also upon the forearm. The lesions vary in size from a small nut to an egg: they are discrete, elevated, rounded, painful inflammatory swellings, excessively tender to the touch. At first pinkish in color, they gradually grow darker in hue, and finally assume the appearance of a bruise. In the beginning they have a firm and tense feel, but become softer as they decline, as if they were suppurating, but suppuration never takes place. The disease usually lasts from two to four weeks.

What is the etiology?

The disease is doubtless one of the forms of erythema multiforme, and is due to the same causative factors. It frequently occurs in individuals suffering from rheumatism. It has been held by some to be analogous to purpura hæmorrhagica. I have seen one case which was followed by purpura hæmorrhagica and ended in death.

What is the pathology?

The disease consists of an inflammation with exudation into the corium and subcutaneous tissue, and a swelling of the lymphatics.

With what affections may erythema nodosum be confounded?

With syphilitic gummata, abscesses, and bruises, but the location of the lesions, the acute course of the disease, the absence of suppuration, and the accompanying constitutional disturbance will distinguish it.

What is the treatment?

Rest and the local application of evaporating lotions; internally, saline laxatives, quinine, antirheumatics, and tonics are indicated.

ERYTHEMA, DESQUAMATIVE SCARLATINIFORM.

What do you understand by erythema, desquamative scarlatiniform?

It is an affection characterized by intense redness of the skin, desquamation, and a habit of recurrence.

What are the symptoms?

After a prodromic period of several days, during which the

patient complains of general malaise, lassitude, and rigors which may be slight or severe, there follow pains in the back and limbs, headache, and fever. With these symptoms or closely succeeding them there appears a diffuse erythema of the skin, which occurs first on the trunk, but in a few hours or days involves the whole body. After a period of several days the skin is shed in flakes, this desquamation lasting in turn for several days. The patient feels quite well again, even before the termination of the eruptive stage, and remains so until a subsequent attack. One of the most striking features of this affection is its tendency to relapse, though each subsequent attack becomes progressively milder.

With what affections may erythema, desquamative scarlatiniform, be confounded?

With erysipelas, eczema erythematosum, pityriasis rubrum, and scarlatina. The distinguishing characteristics will be found under these respective heads.

What is the treatment?

The *treatment* is based upon general principles—internally, tonics, etc.; locally, some soothing oleaginous preparation.

ERYTHRASMA.

What is erythrasma?

Erythrasma is a vegetable parasitic disease of the skin, characterized by variously-sized, slightly scaly patches, occurring where folds of skin are in contact. The color is at first light red, which later becomes yellowish, reddish, or brownish. Occasionally the patches may cover a large surface.

What is the cause of erythrasma?

Erythrasma is due to a vegetable parasite, the *microsporon minutissimum*, which is found in the horny layer of the epidermis and gives rise to the discoloration.

What is the diagnosis?

It is to be distinguished from pigment spots by the scaliness and the facility with which the brownish color may be removed with a dull knife; from chromophytosis by its location only in regions where the skin is in contact, as in the axillary, the inguinal, and genito-crural regions, and by its lighter red color. The microscope will determine the diagnosis.

What is the treatment?

The same as for Chromophytosis, which see.

FAVUS.

Synonym.—Tinea favosa.

What is favus?

Favus is a contagious disease of parasitic origin, characterized by pea- to coin-sized, sulphur-yellow, cup-like crusts pierced by hairs.

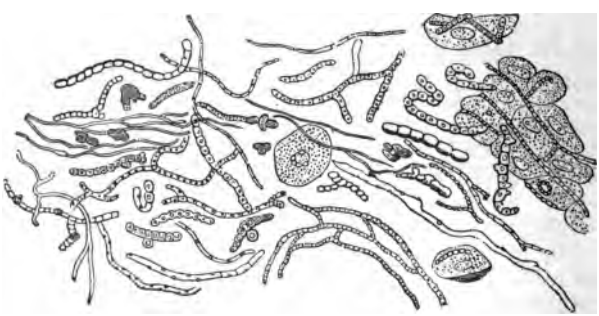
In what location is favus usually found?

The scalp is the part usually affected, though it may appear upon any portion of the skin and the nails. It is met with chiefly in children.

Describe the symptoms of favus?

In the beginning there arise erythematous patches, attended by some itching and desquamation, which are soon followed by the favus crusts. At first they lie beneath the epidermis, are pin-head-sized, and are pierced by a hair. The crusts grow larger quickly, and soon attain the dimensions of a split pea; they are friable, of a canary-yellow color, and are cup-shaped, with the convex surface down and the concave side slightly elevated above the surface of the skin. Upon removal of the crusts at an early stage the underlying skin will be found slightly depressed, but it soon fills up,

FIG. 13.



Achorion Schoenleinii (after Kaposi).

while later the scalp will be found dry, atrophied, and disfigured by small cicatrices. The lesions are at first discrete, but later coalesce. The crusts, from an admixture of dirt and pus, become a dirty brown, or they may, from gradual desiccation, lose their characteristic color and resemble dirty-white mortar both in shade and friability. The odor is characteristic, resembling that of mice. The hair loses its lustre, becomes dry, is easily broken, and falls out; the follicles are eventually destroyed and permanent alopecia results. The progress of favus is slow, the disease lasting sometimes for years.

What is the etiology of favus?

Favus is caused by the presence in the epidermis of the vegetable parasite, the *achorion Schönleinii;* it is most frequently found among the uncleanly and ill-nourished. It is also found in mice, cats, and dogs.

What are the distinguishing characteristics of favus?

The peculiar form, color, and friability of the crusts, with the characteristic odor, the lustreless, broken hair, with patches of bald, atrophied, and scarred skin.

With what affections may favus be confounded, and how would you distinguish it?

With eczema and ringworm. From eczema it is distinguished by the color, form, and dryness of the crusts, the atrophic condition of the skin, and the odor; from ringworm by the crusting and scar formation.

What is the appearance of the fungus under the microscope?

Under a power of from 300 to 500 diameters the fungus is seen to be made up of mycelia and spores. The mycelia consist of flat, narrow threads that branch and anastomose with each other in various directions, and are of a pale-gray or greenish color. The spores are small and of different forms, round, oval, flask-like, or dumbell-shaped, and are found in great numbers.

What is the prognosis of favus?

Under the most favorable circumstances favus of the scalp is an intractable disorder, and will persist for months in spite of treatment. In neglected cases the disease will persist for years, leaving large areas of atrophied, scar-like tissue in its wake, and permanent baldness. Favus of the body is quite amenable to treatment. Affecting the nails, it is always difficult to cure.

What is the treatment?

The *treatment* consists first in removing the crusts and thoroughly cleansing the surface. To accomplish this the hair should be closely cropped and the crusts softened by the application of oils or poultices; then the parts should be washed with hot water and a strong soap, preferably tinct. sapo viridis. The hairs over the affected area and for some distance beyond the border should be epilated. The broad-bladed epilating forceps will be found of the greatest use for this purpose. After this is done, any of the various parasiticides may be employed in ointment or lotion. Whichever one is chosen should be thoroughly applied.

FIBROMA.

Synonyms.—Fibroma molluscum; Molluscum fibrosum.

What is fibroma?

Fibroma is a new growth, consisting of connective tissue, which occurs in the skin as variously-sized, single or multiple, painless tumors.

What are the clinical features of fibroma?

In the circumscribed form there are one, two, or rarely three growths, which always assume a considerable size, in some cases becoming enormous. The generalized form is the most common, and in this form the growths are numerous, consisting of pea- to cherry-sized sessile or pedunculated tumors occupying a large area; the overlying skin is loose and puckered or stretched, normal in color or slightly pinkish, or in some cases is filled with a fine vascular network, giving it a violaceous tint. The tumors are without subjective symptoms. They follow a chronic course and do not affect the general health.

What is the etiology of fibroma?

The etiology is obscure. In some cases it seems to be inherited. It has been suggested that multiple fibromata of the skin are originally neuro-fibromata, the nerves being at first present and then disappearing as the tumor grows and connective tissue becomes more prominent. The affection is very rare.

Is the diagnosis difficult?

It is rarely difficult. The tumors are generally numerous, the skin over them usually normal, and the growths vary in shape and

FIG. 14.

Multiple Fibromata.

size. They are distinguished from molluscum epitheliale by the fact that they do not show the characteristic depressions at their summits; from lipoma in that this tumor is flatter, lobulated, and never pedunculated; from sebaceous cyst in that the contents of the cyst can be squeezed out, leaving the growth smaller in size.

What is the prognosis?

The prognosis is favorable, except for the possibility of malignant degeneration, which must be borne in mind.

What is the treatment?

Removal by the knife, ligature, or galvano-cautery. For the small, hard fibromata on the face the electrolytic needle, passed through the growth just above the level of the skin, gives good results.

FILARIA MEDINENSIS.

Synonyms.—Dracunculus; Guinea-worm disease.

Describe the cutaneous manifestations of filaria medinensis.

The parasite enters the body by the larvæ being swallowed. The young worm makes its way from the alimentary canal to the subcutaneous tissue, where it grows and attains its development. The mature worm may be from several inches to several feet in length and about one-tenth of an inch in diameter. Its presence in the skin gives rise to inflammation and abscess, on rupture of which the worm is discovered.

Treatment.—Its gradual extraction is attempted by winding it around a stick an inch or more daily, taking care not to break the worm during the process. It is usually found in tropical countries. The tincture of asafœtida, given in drachm doses three times a day, is said to be of service.

FRAMBŒSIA.

Synonyms.—Yaws; Pian; Bubos; Parangi; Tonga.

What is frambœsia?

Frambœsia is a contagious disease met with chiefly in Africa and the West Indies. It is characterized by an eruption which appears first as small papules with broad bases, which quickly enlarge. Presently the epidermis cracks, disclosing a small yellowish point, and in the further development there come to be exposed raw, moist, red or pinkish tumors which resemble raspberries. The tubercles vary in size, some being as small as a split pea, and others sufficiently large to cover the whole cheek with an encrusted mass. In shape they may be circular, ovoid, or reniform. They are but little painful and rarely ulcerate, except in vitiated constitutions or from traumatism. The disease rarely attacks whites, being most common among negroes.

What is the prognosis?

It is seldom fatal, recovery taking place in two to four months. It may last with successive relapses for many months.

What is the treatment?

Treatment consists in cleanliness, good food, and tonics as indicated. The use of iodide of potassium and mercury is said to be

of great value in this disease. The local treatment consists of dressing with antiseptic lotions or ointments.

FURUNCULUS.

Synonyms.—Furuncle; Boil.

What is furunculus?

Furunculus or boil is an acute, painful, circumscribed, phlegmonous inflammation, occurring around a skin-gland or follicle: it usually suppurates and expels a central slough or core.

What are the symptoms of a boil?

A boil begins with a slight itching sensation, and presently there will be noticed a little pimple or superficial pustule. In a short time the lesion becomes more elevated, of a conical shape, and the surrounding skin becomes red, inflamed, and swollen. At the apex of the swelling a point of suppuration is soon detected, and in a week or ten days the boil matures, and finally expels the central slough or *core*. The pain, which at first was of a pricking character, becomes a dull ache, accompanied by a constant throbbing and a feeling of tension. Boils may occur singly or in numbers. When occurring in numbers and in successive crops the condition is called *furunculosis*.

What do you understand by a "blind boil"?

A blind boil is one that does not suppurate or form a central core, but which after a more or less persistent course, disappears by absorption.

Is there any systemic disturbances with furunculus?

In most cases it is slight, but in furunculosis that has existed some time there may be great restlessness, anorexia, and emaciation resulting from the constantly recurring pain and from discharge of pus.

What is the etiology?

When boils occur singly they are often due to some extreme irritation. Certain diseases seem to predispose the system to the development of boils, as diabetes, variola, measles, and scarlatina. The immediate exciting cause is the entrance into the follicle of a pyogenic microbe; a favorable soil seems to be necessary, however, for it to exert its pathological influence.

What is the pathology of furunculus?

A boil is a localized inflammation having its beginning in a skin-gland or hair-follicle: it does not differ from any other localized inflammation except by its seat and extent. The core represents a necrosis induced by the violence of the exudation: it differs from any other slough—as that from a burn, for example—only in being situated completely beneath the epidermis and soaked with pus.

What is the diagnosis?

The *diagnosis* offers few difficulties. From carbuncle it may be distinguished by its smaller size, its pointed shape, and its single point of suppuration, while carbuncle occurs usually singly, is larger, flatter, and has multiple openings.

What is the prognosis?

The *prognosis* is always good. When boils occur in crops they may be very persistent, but a successful outcome is the invariable result.

What is the treatment?

When the boils occur in numbers or in successive crops, *internal treatment* will be found necessary. The general condition of the patient must be improved with tonics, as cod-liver oil, iron, quinine, arsenic, and strychnine. The administration of calcium sulphide is said to be of value. The local treatment is always of the greatest importance, and when the boils occur singly it alone will be found sufficient. In the beginning pure carbolic acid, applied to and within the centre of the lesion, will often abort it. Even when it is advanced its course is shortened by this means. A 10 per cent. salicylic plaster is often of service. When suppuration has taken place, the boil should be freely opened, thoroughly cleansed, and packed with antiseptic gauze. The skin in the neighborhood of existing lesions should be kept free from infection by the application of antiseptic dressings.

FURNUCULUS ORIENTALIS.

Synonyms.—Aleppo button; Delhi boil; Biskra button.

What is furunculus orientalis?

It is a rare affection, endemic in certain Oriental countries. Its usual seat is on the face and exposed regions of the body. It begins as a papule, which gradually enlarges to form a glossy, boggy,

and adherent tumor. The growth finally breaks down and an ulcer results which is covered by a scab; and when resolution takes place it leaves a pigmented, disfiguring scar. Its duration is about a year. Recurrences are exceptional.

HERPES SIMPLEX.

What do you understand by herpes simplex?

Herpes simplex is a disease of the skin distinguished by the occurrence of one or more small vesicles disposed in groups limited to certain regions of the body.

Describe the clinical appearance of herpes simplex?

The eruption consists of one or several millet-seed-sized or larger vesicles, which when multiple occur in groups. The vesicles at first contain a clear serum, which later may become lactucent. The vesicles usually last from five to eight days, and unless accidentally ruptured dry into brownish crusts, which fall off, causing no loss of substance. If ruptured, there is seen some slight excoriation, which at times is accompanied by a circumscribed hyperæmia and infiltration. The subjective symptoms are slight, and consist of a tingling, burning, or itching. Occasionally the eruption is ushered in by some slight febrile disturbance.

What is herpes facialis?

Herpes facialis is the name given to herpes simplex when it occurs upon the face. It is usually seen upon the lips, the angles of the mouth, or upon the alæ of the nose; rarely upon other parts of the face. The eruption possesses the characteristics described above. It is often recurrent, and is usually seen in connection with pneumonia, typhoid and malarial fevers, though it may also be due to traumatism, exposure to excessive heat or cold, or to disturbances of the digestive tract.

How would you diagnose herpes facialis?

The occurrence of groups of vesicles about the mouth or lips, especially in connection with any of the severe febrile disorders, makes the diagnosis easy.

What is herpes progenitalis?

Herpes progenitalis is the name given to herpes when it occurs about the genitalia. It is most frequently seen upon the prepuce

in the male and upon the labia in the female. The eruption here, as in herpes facialis, possesses the features already described. When it occurs on the under surface of the prepuce or between the labia, the moisture of the parts macerates the vesicles and they easily rupture, leaving an excoriated surface which often becomes inflamed and œdematous, resembling very closely a chancroidal sore. Herpes occurring in this locality is especially prone to recurrence.

What are the causes of herpes progenitalis?

Herpes progenitalis is usually due to external irritation, either through coitus or the chafing of the parts against the clothing. After the first attack the surface is left peculiarly sensitive, and the slightest irritation is sufficient to induce a recurrence. It sometimes occurs from the effect of irritating discharges, and certain cases are doubtless of a purely neurotic origin.

What is the diagnosis of herpes progenitalis?

Herpes progenitalis is to be distinguished from chancroid and chancre. In chancroid the lesions usually are more severe in character, with a more profuse puriform secretion, which is autoinoculable; the inflammation and swelling are greater, and the neighboring glands, especially the inguinal, are soon implicated with abscess formation. In chancre there is a period of incubation, the inguinal glands are swollen and hard, and later the concomitant symptoms of syphilis develop. The lesions of herpes progenitalis are often the seat of infection for the specific disease, and in such cases no diagnosis can be positive until the longest period of incubation of the syphilitic chancre has elapsed.

What is the treatment of herpes?

The milder forms of herpes occurring upon the face or genitalia require but simple measures. Sponging the parts with hot water, and afterward applying an astringent lotion, as equal parts of glycerite of tannin and rose-water, will usually suffice. Upon the genitalia the parts are to be kept thoroughly cleansed and protected by the interposition of pledgets of antiseptic lint or absorbent cotton, or of antiseptic dusting-powders; antiseptic and astringent lotions will also be found of service in addition to the above. In recurrent attacks the application of the mild galvanic current may be used to advantage as a prophylactic.

HERPES ZOSTER.

Synonyms.—Zoster; Zona; Shingles.

What is herpes zoster?

Herpes zoster is an acute, inflammatory disease of the skin, characterized by unilateral eruption consisting of groups of vesicles, on reddened, inflamed bases, distributed over the course of a cutaneous nerve.

What are the symptoms of herpes zoster?

The disease begins with more or less severe neuralgic pain, limited to the course of a cutaneous nerve. The neuralgia is sometimes accompanied by slight systemic disturbance. After two or three days the eruption appears in the form of small erythematous patches, upon which minute grouped papules are seen, which speedily develop into distinct vesicles, varying in size from a millet-seed to a split pea. Often they appear in great numbers, in which case two or more vesicles may coalesce to form a large bleb. Their contents are at first clear, but soon become turbid and puriform. The vesicles do not rupture spontaneously, but in the course of ten days dry up into brownish crusts, which drop off, leaving a reddened surface and in some cases slight pits and scars. Sometimes it is possible to abort the eruption, in which case it never advances beyond the papular stage. In nearly all the cases the eruption is unilateral, sometimes ending with an abrupt margin at the median line.

Where is herpes zoster usually found?

The most common seat is on the trunk over the course of the intercostal nerves, though it may occur anywhere in the course of cutaneous nerves. Herpes zoster ophthalmicus may be a very serious affection, from the formation of vesicles on the cornea, which may lead to ulceration and permanent corneal opacities. I have seen one case of zoster affecting the mucous membrane of mouth, throat, and tongue.

What is the cause of herpes zoster?

It is produced by any irritative lesion or condition in any part of the nerve-tract from the cord to the periphery of the nerve supplying the affected skin. This condition may be produced by exposure to draughts of air, sudden changes of temperature, or any nerve-injury.

What is the prognosis?

The *prognosis* is good. The disease is self-limited, and usually disappears in from ten days to four weeks. In elderly persons the neuralgia is usually very severe, and may continue for weeks and months after the disappearance of the eruption. Most cases are much benefited by treatment.

FIG. 15.

Zoster of Arm.

What are the diagnostic features of zoster?

The severe neuralgic pain preceding and accompanying the disease, the unilateral disposition of the eruption, which often ends abruptly at the median line, together with the groups of vesicles limited to the course of the nerve-tract, are too characteristic to be mistaken.

What is the treatment?

Quinine and the phosphide of zinc may be used to advantage. The disease can be aborted, and, when developed, the severity lessened and the pain almost entirely mitigated, by the use of the galvanic current. The current is applied over the affected part by means of a metallic roller attached to the negative pole of the battery. Any simple dusting powder may be used to protect the parts from the irritation of the clothing.

HYPERÆSTHESIA.

What do you understand by hyperæsthesia?

An exaggerated sensibility of the skin unattended by any structural change. It may be idiopathic or symptomatic. The idio-

pathic form is a more or less localized patch of skin in which the sensitiveness is simply a neuralgia of the cutaneous nerves supplying the part. The symptomatic form is one of the accompanying symptoms of other nerve disorders, as hysteria, tetanus, or certain forms of motor paralysis where sensation has been retained. It may be localized or affect large areas of surface.

HYPERIDROSIS.

What is hyperidrosis?

Hyperidrosis is a functional disorder of the sweat-glands in which the secretion is excessive in amount. The increased secretion may be localized or affect the general surface. Local hyperidrosis is the excessive secretion affecting limited portions of the body. It is most frequently seen upon the palms of the hands, the soles of the feet, the interdigital surfaces, the axillæ, the inguinal region, and about the genitals.

What are the characteristic conditions of the local variety?

When affecting the axillæ there will be simply an excessive secretion, so profuse as often to stain the clothing. In the inguinal region and about the genitals the increased moisture frequently gives rise to intertrigo. Upon the hands there is increased secretion: the palms are wet and bathed in a profuse perspiration even immediately after drying. When the feet are affected, they are wet, cold, and frequently have a disagreeable odor from the decomposition of the secretion. The skin becomes macerated, and about the borders may be inflamed and painful in consequence. The disorder may be temporary or it may exist for a long time.

What is the etiology?

The causes are obscure, but in most cases there is doubtless some fault in the nervous system. General hyperidrosis is often the result of systemic weakness.

What is the prognosis?

The prognosis should be guarded. Some cases may be cured, while others may be benefited by treatment. Most cases, however, are intractable.

What is the treatment?

For general hyperidrosis constitutional treatment is of service. Tonics are indicated when disability is the cause. Among the

many drugs which exert a favorable influence in this condition are ergot, belladonna, atropine, and the mineral acids. The local form of the disease is best treated by local applications. Lotions of zinc sulphate, tannin, and alum are of service. A 1 per cent. solution of quinine in alcohol is recommended. Dusting powders containing from 5 to 10 per cent. of salicylic acid will be found useful in hyperidrosis of the feet; also the following: diachylon ointment, applied on strips of muslin and changed every twelve hours, the parts each time being thoroughly dried with soft towels and dusting powder.

HYPERTRICHOSIS.

Synonyms.—Hirsuties; Hypertrophy of the hair; Superfluous hair.

FIG. 16.

The Russian "Dog-faced Man."

What is hypertrichosis?

Hypertrichosis is an abnormal growth of the hair. It may be abnormal in regard to its length, its thickness, its situation, or in the age and sex of the patient.

What are the several varieties?

The growth may be general, except in places where normally there are no hairs, as on the palms and soles, or it may be slight, occurring upon a mole, or it may occur upon the face or arms, in females, due to an excessive growth of the lanugo hairs. It is this latter condition that comes most frequently to the notice of the dermatologist.

What is the etiology?

Racial tendency, heredity, and nervous influences are probable causative factors. In women the acquired form generally first shows itself toward middle life; uterine derangements are said by some writers to favor its development, while others deny this. Exposure to heat and moisture seems to favor its development, as does any prolonged stimulation of the skin. In many cases no cause can be found, and then it must be regarded simply as a freak of nature.

What is the treatment?

General hypertrichosis is incurable. The various depilatories have but a temporary effect. The only permanent treatment is in destruction of the growth by electrolysis.

Describe this method.

A fine jeweller's brooch or irido-platinum needle, held in a suitable needle-holder which is attached to the negative pole of a galvanic battery, is introduced along the hair-shaft to the bottom of the hair-follicle. After the needle is introduced the circuit is completed by the patient placing the fingers on a moistened sponge electrode which is connected with the positive pole of the battery. In a few seconds frothing is seen at the mouth of the follicle. Gentle traction is now made on the hair with a pair of light forceps, and in from fifteen to forty seconds the hair loosens and comes away with the traction. The current is then broken by the patient removing the fingers from the electrode, after which the needle is removed.

A slight urticaria-like swelling is often noticed after the hair is

FIG. 17.

Electrolysis Needle.

FIG. 18.

Ichthyosis.

removed, which, however, disappears in a few hours. A strength of current of one to three milliampères is used, or ten to twelve freshly-prepared cells of a galvanic battery. Contiguous hairs should not be removed at the same sitting, in order to avoid severe inflammation with resulting scars. From twenty to forty hairs may be removed at a sitting, or more if the surface covered is extensive. After the operation the parts may be fomented with hot water to allay the slight inflammation and swelling that often follow.

ICHTHYOSIS.

Synonym.—Fish-skin disease.

What is ichthyosis?

Ichthyosis is a congenital hypertrophic disease of the skin, distinguished by dryness, scaliness, and roughness of the surface and the development of plates and warty growths.

Into how many varieties is it divided, and what are they?

Two—ichthyosis simplex and ichthyosis hystrix. The former is simply a mild type of the disease, while the latter is much more severe.

What are the objective features of ichthyosis?

In many cases there are simply an unusual dryness and a roughness of the skin, more apparent on the extensor surfaces and about the elbows and knees. Associated with this thickening and scaly state of the epidermis is always a papular condition, due to accumulation of horny cells in the hair-follicles. In the severer forms the skin is thickened and fissured. Plates of skin not unlike alligator-hide are found. The color of the scales in the mild cases is usually white and silvery, while in the severer varieties it is greenish or blackish. In ichthyosis hystrix, which is simply a greater development of the milder variety, there are localized patches of excessive hypertrophy, greenish or blackish in color, often having a pointed, spinous appearance resembling the quill of the porcupine, from which the term "hystrix" is derived. These spines may be picked off, showing a dry and shrivelled skin with papillary hypertrophy. Although it is congenital, ichthyosis does not usually show itself until some months after birth or about the second year. It begins as an unusual dryness of the skin, which is first seen about the elbows and knees, and gradually spreads over the entire surface,

affecting principally the extensor surfaces. The scalp is also affected, the hair being dry and brittle and lacking lustre.

What is the etiology of ichthyosis?

Ichthyosis is a congenital condition often hereditary. The *cause* is unknown. The general health is usually good; the patient feels entirely well, and in the milder cases the trouble would hardly be noticed. Sometimes in the severer forms the skin may become sore from fissures forming in cold weather.

What is the pathology?

Ichthyosis consists of hypertrophy of the epidermis and papillary layer.

Is the diagnosis difficult?

The rough, dry, scaly condition of the epidermis, which has existed from infancy, the formation of the peculiar alligator-skin-like plates, and the absence of inflammation or involvement of the general health make the diagnosis simple.

What is the prognosis?

Ichthyosis is an incurable affection, but by persistent care the skin may be kept in a very comfortable condition.

What is the treatment?

Treatment consists in removing the scales and rendering the skin soft with emollient applications. Hot-water or steam baths, with soap frictions, will usually suffice. In severe cases the bath may be preceded by inunction with a 10 per cent. salicylic-acid ointment to soften the epidermal accumulations.

IMPETIGO.

Synonym.—Impetigo simplex.

What is impetigo?

Impetigo is an acute inflammatory disease, distinguished by the appearance of single or multiple, discrete, pea-sized, elevated pustules, unattended, as a rule, by itching.

What are the symptoms of impetigo?

The eruption is occasionally attended by slight constitutional symptoms. It consists of discrete and scattered pustules, varying in number from one to a dozen, which, even when in close proxim-

ity, do not tend to coalesce. They are tense, raised, rounded, of a whitish color, situated upon somewhat inflamed bases and surrounded by areolæ. They do not rupture, but their contents several days after maturity are partially or altogether absorbed, or dry into yellowish or brownish crusts, which fall off, leaving neither pigmentation nor cicatrix. The disease tends to a speedy recovery; relapses are not uncommon.

What is the cause of impetigo?

It is a non-contagious affection, and occurs most frequently in illy-nourished young children. It is sometimes associated with disturbance of the digestive tract.

What diseases does impetigo resemble, and how would you distinguish it?

Ecthyma, eczema, and impetigo contagiosa. *Ecthyma* occurs in illy-nourished adults: the lesions are attended by a much severer form of inflammation; the base is indurated; the crusts are brownish or blackish, and upon removal disclose loss of substance. The pustules of *eczema* are numerous and tend to coalesce, and the discharge and crusting are marked features. In *impetigo contagiosa* the lesions are at first vesicular and tend to coalesce, drying after a few days into a light-yellowish, honey-like crust. It is, moreover, contagious, being often carried from one part to another by scratching.

What is the prognosis of impetigo?

The *prognosis* is good. The disease is self-limited, and usually disappears in a week or ten days.

What is the treatment?

Opening the pustules and applying a soothing protective dressing, as Lassar's paste, are usually sufficient. The disease often disappears without treatment.

IMPETIGO CONTAGIOSA.

What is impetigo contagiosa?

Impetigo contagiosa is an acute inflammatory contagious affection, distinguished by the formation of one or more pea- to finger-nail-sized rounded or elevated vesico-pustules, that dry into straw-colored, flat, and wafer-like crusts.

What are the symptoms?

The eruption may be preceded by a slight systemic disturbance. The eruption begins as minute, discrete, acuminate vesicles, which grow to the size of a pea or larger. The contents, which are at first serous, become sero-purulent. In a few days the lesions, which have become flat and umbilicated, dry to thin yellowish, slightly adherent crusts. When the crusts fall off the surface beneath is red, as if from a burn. Scarring does not occur.

What is the cause of impetigo contagiosa?

The definite *cause* is unknown. It is contagious and auto-inoculable. It is sometimes seen in connection with vaccinia. It occurs most commonly in children and young adults and in those who are poorly nourished.

What are the diagnostic features of impetigo contagiosa?

The size and umbilicated character of the lesions, the absence of marked inflammatory action, the drying into thin, yellowish crusts, and the history of contagion.

What is the prognosis?

Favorable. With suitable treatment the disease may disappear in a few days.

What is the treatment?

The application of an ointment of ammoniated mercury, ten to fifteen grains to the ounce, or of Lassar's paste.

KELOID.

Synonyms.—Keloid of Alibert; Cheloid.

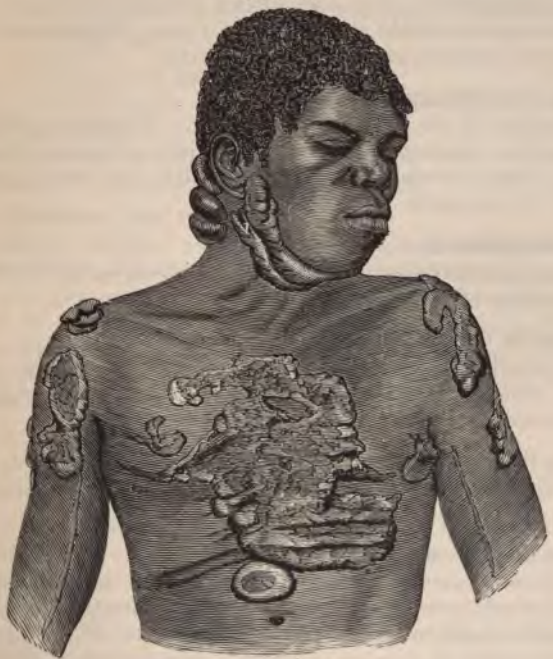
What is keloid?

Keloid is a connective-tissue new growth, characterized by one or more white or pinkish, firm, elastic elevations of various sizes and shapes, resembling a hypertrophic cicatrix.

Describe the symptoms of keloid.

The disease usually begins as a small pea-sized nodule, which increases slowly in size, and usually assumes, when developed, an oval, elongated form, or it may occur in streaks or lines. The outline is well defined: it is elevated, rounded, and is firm, dense, and elastic to the touch. The surface is smooth, shining, and hairless, of a white or pinkish color, and with no disposition to the formation of

FIG. 19.



Keloid.

scales. Occasionally one or more fine capillaries may be seen upon it. It is sometimes hypersensitive to pressure and heat, and at times is the seat of spontaneous pain. It is most frequently met with upon the sternal region, though it may be found upon other parts of the body.

What is the course of keloid?

Its development is slow, and, having reached a certain size, the lesions are apt to remain stationary for years. Spontaneous disappearance of keloid is possible, but very rare.

What is the etiology of keloid?

The origin of the disease is unknown. Hereditary predisposition has been observed. It is very frequent in negroes. It always develops from scar-tissue, though frequently the original lesion is difficult to determine.

Give the pathology.

It is a connective-tissue new growth, limited to the middle and lower portions of the corium.

What is the diagnosis?

The situation, course, and history of the disease, the pinkish, smooth, shining lesions, painful upon pressure, and sometimes spontaneously so, make the diagnosis easy.

What is the prognosis?

The disease, as above stated, may undergo spontaneous cure, but is rarely amenable to treatment.

What is the treatment?

The growth may be sometimes lessened by the long-continued application of mercurial plaster. Ichthyol ointment, 25 per cent. in strength, is said to be of service. Excision of the growth is rarely successful, as it is apt to return. Destruction of the growth by electrolysis has been tried by some with good results.

KERATOSIS PILARIS.

What is keratosis pilaris?

Keratosis pilaris is an hypertrophy of the epidermis, characterized by the presence of numerous small accumulations of epithelium seated about the mouths of the hair-follicles.

What are the clinical features of keratosis pilaris?

The disease occurs most commonly on the outer surfaces of the arms and thighs, and consists of small whitish or dirty-looking papules, often pierced by a hair: sometimes when the horny accumulation is picked off the hair will be seen coiled up or broken off beneath it. Occasionally the papules are red, and now and then small pustules will be seen. The intervening skin is usually normal, but at times it may be rough and scaly. Occasionally considerable pruritus may be present.

What is the cause of keratosis pilaris?

It is most frequently found at the age of puberty or in adults who do not bathe often, though it sometimes occurs in persons of cleanly habits, in which case it seems to be due to an inherited disposition. It is a frequent accompaniment of ichthyosis.

What conditions does it resemble?

The miliary papular syphiloderm and lichen scrofulosus. The papules of the *syphiloderm* are more widely distributed, tend to form concentric groups, show no predilection for the extensor surfaces, and are of a coppery color; moreover, other symptoms of syphilis are usually present. *Lichen scrofulosus* occurs upon the trunk; the lesions tend to group and form patches; and it occurs usually in scrofulous children.

What is the prognosis?

The *prognosis* is invariably good. The disease quickly disappears under treatment.

What is the treatment?

When due to uncleanliness, frequent bathing with soap and hot water will effect a cure. In other cases soap frictions with bland ointments give good results. A 5 per cent. salicylic-acid ointment will be found of service in softening the epidermis when the disease is obstinate.

KERATOSIS SENILIS.

Synonyms.—Verruca senilis: Keratosis pigmentosa.

What is keratosis senilis?

Keratosis senilis is an hypertrophic disease, characterized by the formation of localized accumulations of scales, occurring in aged persons.

Describe the clinical appearance of keratosis senilis.

Situated for the most part upon the backs of the hands and the upper part of the face, and occasionally elsewhere upon the body, are seen small flat, dry freckle-like accumulations of .epidermic scales, varying from a split pea to a finger-nail in size, which, upon removal, reveal a slightly bleeding surface.

Of what importance is this condition?

It is of importance from the fact that these patches frequently undergo malignant transformation, being the starting-points for epithelioma.

What is the prognosis?

Favorable when seen before degenerative changes have taken place.

What is the treatment?

Soap friction, followed by the application of an ointment containing sulphur or salicylic acid of from 5 to 10 per cent. strength. When degenerative change has begun, complete removal by means of the curette, as in epithelioma, is most effectual.

LENTIGO.

Synonyms.—Ephelides, freckles.

What do you understand by lentigo?

Lentigo is an excessive deposit of pigment in the skin which manifests itself in the appearance of millet-seed to pea-sized spots of a yellowish or brownish color, seen chiefly upon the face and the backs of the hands, though they may occur upon other parts of the body. Once developed, these spots may persist throughout life, or they may fade with the change in season, sometimes disappearing entirely in winter. They occur most frequently in persons having red hair and a delicate skin or in mulattoes, who are particularly susceptible to aberrations in pigment distribution. Freckles are produced and aggravated by exposure to strong winds and the action of the sun's rays.

What is the prognosis?

The temporary removal of freckles is not difficult, but a permanent cure is almost impossible, as they are very prone to return. In some instances they disappear spontaneously when the exciting causes are removed.

What is the treatment?

The application of the following ointment is said to be of service in removing freckles:

℞. Hydrarg. ammoniat.,
Bismuth. subnit., āā. ʒj;
Ung. glycerini, ℥j.—M.
Sig. To be applied every other night. (*Prof. Wertheim.*)

The following lotion may be used:

℞. Hydrarg. chlor. corros., gr. vj;
Acidi acetici dil., fʒij;
Boracis, ℈ij;
Aq. rosæ, ℥iv.—M.
Sig. To be applied night and morning, at first with gentle brushing, afterward by rubbing. (*Bulkley.*)

Removal by electrolysis is highly recommended.

LEPRA.

Synonyms.—Leprosy; Elephantiasis græcorum; Leontiasis.

What is leprosy?

Leprosy is a chronic, parasitic, malignant constitutional disease, capable of producing alterations in all the tissues of the body and of developing a cachexia which usually terminates in death. In rare instances premonitory symptoms are wanting, but in most cases the appearance of the disease is preceded by symptoms of marked constitutional disorder. These symptoms consist of malaise, depression, chills, alternating with fever, gastro-intestinal disturbance, and pains in the bones. Their duration is variable, and in some cases they may occur months or even years before the disease manifests itself, while in other cases they are followed in a few weeks by the objective symptoms peculiar to the disease.

The earlier cutaneous lesions of leprosy are tubercular, bullous, or macular. These may coexist, a given case presenting all three forms together, or one or the other form may predominate, showing only one type of lesion.

For purposes of classification only, the disease is usually described under two forms, the *tubercular* and the *anæsthetic*.

Describe the symptoms of the tubercular form.

The eruption in this form of leprosy begins with erythematous,

FIG. 20.

Tubercular and Anæsthetic Leprosy.

shiny, infiltrated, hyperæsthetic spots of a reddish-brown color, varying in size from a coffee-bean to a tomato, occurring upon the face, trunk, or extremities. The spots may fade away or change to permanent brownish-red stains. After a period ranging from weeks to years, tubercles rise upon these maculations, varying in size from a split pea to an egg. They are yellowish or reddish-brown in color, and may attain a great size, or by coalescence may form large irregular, nodulated masses. The site of predilection of leprous tubercles is the face, and the massing of great numbers upon this region produces the characteristic leonine expression known as *leontiasis*. The tubercles may present different terminations. They may remain unaltered indefinitely or undergo involution, leaving brownish maculations, or ulcerations may take place, the ulcers healing very slowly, often only to break down again. The mucous membranes may be affected. The features of the anæsthetic form may be superadded, thus producing what is known as the "mixed form" of leprosy.

Describe the symptoms of the anæsthetic form.

With or without prodromic symptoms a hyperæsthesia of the skin is noted in different parts, together with lancinating pains. A bullous eruption makes its appearance, especially upon the extremities. After a time erythematous spots and patches come out on the trunk, limbs, and face. The macules are one or two inches in diameter, and later by coalescence may cover large areas, and at first are accompanied with neither hyperæsthesia nor anæsthesia, but only with slight burning and itching. The spots enlarge at their periphery: the borders are raised, and the centres become hairless, wrinkled, dry, atrophic, and covered with furfuraceous scales. The patches are now decidedly anæsthetic. The nerves, especially the ulnar, become enlarged, and can be plainly felt under the skin. Muscular atrophy is a prominent symptom. The bones finally become affected, and the condition known as *lepra mutilans* is developed. From the atrophy of the tissues the fingers are drawn down into the palms; ulceration exposes the bone; caries takes place, and the fingers become spontaneously amputated.

What is the etiology of leprosy?

Leprosy is due to a peculiar bacillus (*bacillus lepræ*). It is a contagious (by inoculation) and infectious disorder, and is trans-

mitted by the secretions containing this bacillus or its spores. It occurs in both sexes and at any age, and bears no relation to syphilis.

What can you say concerning the diagnosis?

In well-marked cases leprosy is easily recognized. It should be differentiated from erythema multiforme, lupus, syphilis, leucoderma, morphœa, and progressive muscular atrophy. Microscopic examination of the diseased tissue will often reveal the bacillus and make the diagnosis positive.

What is the prognosis?

The *prognosis* is generally bad, most cases terminating fatally in the course of years. Treatment may check the disease for some time.

What is the treatment?

No remedies are known that have a directly specific effect, and each case must be treated for its individual indications. Change of air, good nutritious diet, cleanliness, and general hygienic care are of the greatest importance. Baths are of great service, and may be either plain or medicated. The ulcerating surface must be kept clean and dressed with antiseptics. Internally, the exhibition of tonics, iron, arsenic, strychnine, cod-liver oil, wines, and malt liquor are indicated. Gurjun oil and chaulmoogra oil are said to be of value, and are used both internally and externally.

LEUCODERMA.

What is leucoderma?

Leucoderma, or vitiligo, is an acquired pigment-atrophy of the skin, characterized by variously-sized and shaped, smooth, white, non-elevated patches, surrounded by excessive deposits of pigment.

What are the symptoms of leucoderma?

The disease is seen most frequently in the negro. The patches vary in size from a finger-nail to the palm of the hand, are round or ovalish in outline, white or pinkish in color, smooth, and not elevated above the surface. Surrounding each patch the skin is darker than normal from an excessive deposit of pigment. Hairs occurring in this area may be white or retain their normal color. Except for the absence of pigment the skin is in every way normal.

The disease is generally progressive, and may finally involve the

FIG. 21.

Vitiligo in a Negro Boy (Piffard's case).

entire body. The progress is often stayed for a longer or shorter time, and rarely the pigment may be regained.

What is its etiology?

The *etiology* is obscure, but the disease is doubtless due to atrophic nerve-disturbance. It may occur symptomatically with morphœa and alopecia areata.

At what age does leucoderma usually occur?

Between the tenth and thirtieth years.

What is the pathology?

The affection consists of an absence of pigment over the white patch, with an increase of pigment about its border.

What diseases does leucoderma resemble, and how is it distinguished?

Morphœa and the anæsthetic form of leprosy. In *morphœa* the patches are usually surrounded by a pinkish border made up of minute capillaries, and are accompanied by more or less structural change. In *anæsthetic leprosy* the patches are attended by an aberration of sensation and by structural change, and these also present symptoms of marked constitutional disturbance.

What is the prognosis?

The *prognosis* is unfavorable, though in rare cases the pigment may return.

What is the treatment?

Treatment, so far as a cure is concerned, is generally unavailing. General hygienic measures with nerve-tonics may be of service. The unsightliness of the patches may be lessened by removing the pigment about the border, as in freckles, or by staining the white patch with walnut juice.

LICHEN PLANUS.

What is lichen planus?

Lichen planus is a chronic inflammatory disease, characterized by the appearance of pin-head to pea-sized, discrete or aggregated, flat, angular papules, having the appearance of umbilication at the apex.

Describe the clinical appearance of lichen planus.

The eruption begins in the form of round red papules, that

eventually become more or less angular in outline, varying in size from a pin-head to a split pea. The surface of the papule is flat, glazed, and waxy, with a depression in the centre. When the papules have existed for some time they are somewhat scaly. In color they are purplish-red or lilac-colored. They may be discrete or become aggregated so as to form patches, but they never lose their individuality.

The disappearance of the papules is usually followed by more or less deep pigmentation. Itching is usually present, and in some cases is very severe.

Upon what parts does lichen planus appear?

The eruption is usually symmetrically distributed. The sites of predilection are the flexor aspects of the forearms and wrist, the flanks, around the waist, the lower part of the abdomen, and the flexor aspects of the knees. It may appear upon any part of the body, including the ears and face.

What is the course of lichen planus?

The eruption is chronic, tends to linger for years within distinctly circumscribed areas, and is attended with no constitutional symptoms.

What is the etiology?

The *causes* of the disease are obscure. It is doubtless of neurotic origin.

With what disease may it be confounded?

With papular eczema, psoriasis, and the miliary syphilide. The large flat, angular lesions with umbilicated centre and with its marked individuality, even when occurring in patches, will be sufficient to establish the diagnosis.

What is the prognosis?

The disease is amenable to treatment, and when this is suitable the prognosis is favorable.

What is the treatment?

When indicated, general tonic treatment should be employed. Arsenic is said to give excellent results as a specific; mercury is also recommended. Local applications containing tar or carbolic acid will relieve the itching. In the chronic cases stimulating applications are needed. The following ointment is said to be excellent:

℞ [illegible] gr. ii–v;
[illegible] gr. x–xx;
[illegible] ℥i.

Salicylic acid with chrysarobin, of each 10 per cent. in traumaticin, is recommended for painting localized patches.

LICHEN RUBER.

What is lichen ruber?

Lichen ruber is an inflammatory disease, characterized by the appearance of pinhead- to pea-sized, reddish, conical, discrete, or confluent papules, with constitutional symptoms.

Describe the clinical appearance of lichen ruber.

The eruption begins with no prodromal symptoms, and consists of discrete miliary papules covered with scales. These papules remain of the same size. As the disease advances the lesions become more aggregated and finally come into contact and form continuous, variously sized and shaped patches, red, infiltrated, and scaling. Eventually, the entire integument becomes involved, and is the seat of infiltration, reddening, and scaling. As a consequence, fissures form and the distress of the patient is increased. The skin of the face cracks; the eyelids are thickened and everted; the skin of the palms and soles becomes leathery; the nails become friable and irregular; the hairs are thinned and fall out. Deep fissures form over the joints; the patient emaciates, and finally dies of exhaustion.

What is the etiology?

The *etiology* is obscure. The disease occurs in both sexes, though men suffer from it more than women. It usually occurs from the tenth to the fortieth year.

From what diseases should lichen ruber be differentiated?

In the early stages from papular eczema, psoriasis, lichen planus, and the papular syphilides; and in the later, from generalized eczema and psoriasis.

What is the prognosis?

The *prognosis* in most cases is unfavorable, though a fatal termination is not invariable.

What is the treatment?

Internally, tonics of iron, quinine, phosphorus, and strychnine are of service. Arsenic has been used in some cases with success. Local applications render the patient more comfortable, and sometimes aid in recovery. Lanolin and other emollient preparations are recommended. Salicylic acid in ointment or plaster is used to lessen the infiltration.

LUPUS ERYTHEMATOSUS.

Synonyms.—Lupus erythematodes; Lupus sebaceus; Erythema centrifuga; Seborrhœa congestiva.

What is lupus erythematosus?

Lupus erythematosus is a cutaneous new growth, characterized by the appearance of one or more variously sized and shaped, pinkish or reddish patches, covered with yellowish adherent scales, and terminating by the production of a superficial scar.

What is the usual site for lupus erythematosus?

It is usually symmetrical, and is most frequently seen upon the face, particularly over the nose and cheeks. A characteristic form is the butterfly shape, caused by coalescence of patches over the bridge of the nose and on the cheeks under the eye. It may occur elsewhere upon the skin, and also upon the mucous membranes.

Describe the clinical appearance of erythematous lupus.

The eruption usually begins as a pinhead- to pea-sized, slightly elevated spot, which is covered with a thin papery scab, upon the under surface of which little prolongations dip down into the sebaceous follicles. These spots may be few or many, and gradually, by peripheral extension and coalescence, they form patches of various sizes and shapes. These patches are reddish or purplish-red in color, are somewhat elevated and distinctly outlined against the healthy skin, and have central depressions which sometimes amount to loss of tissue and subsequent cicatricial formation. The patches are somewhat scaly and are studded with comedones, or show patulous openings of the gland-ducts. The disease is sometimes attended with slight burning and itching, but is often without subjective sensations. The general health is not usually affected. The disease is chronic in its course and progresses slowly, lasting sometimes for years. Occasionally it may disappear spontaneously, almost invariably leaving scars.

What is the etiology?

The *etiology* is unknown. It occurs more frequently in women than in men, and between the twentieth and thirtieth years. Persistent local hyperæmia may be looked upon as an exciting cause.

What is the diagnosis of lupus erythematosus?

The age of the patient, the location upon the face or nose, the well-defined margin, the violaceous color, and the central atrophy wite scarring, are usually sufficient to distinguish it. Rosacea, lupus vulgaris, ringworm, and some forms of syphilis occasionally resemble it closely.

What is the prognosis?

The *prognosis* should be guarded. Some forms of the disease are quite amenable to treatment, while others may be exceedingly difficult to cure. The disease seldom affects the general health, except in the so-called disseminate form.

What is the treatment?

There are no remedies that exert a specific action in lupus erythematosus, and internal treatment is rarely satisfactory. The use of arsenic, iodine, and iodide of potassium has sometimes done good, but of greater service are the iron tonics and cod-liver oil, together with a good nutritious diet and general hygienic care. The local treatment will vary as to the acuteness and extent of the disease. It is wise always to begin with soothing applications, and gradually use stronger ones if found necessary. An excellent ointment is the following:

℞. Acidi salicyl., gr. xij;
Sulphur. præcip., ℈ij;
Ung. aq. rosæ, ℥j.—M.
Sig. Rub thoroughly into the patch twice daily.

Tinct. sapo. viridis, bound on to the part on a piece of lint, is very effectual, or the patch may be thoroughly scrubbed with it, after which the above ointment or officinal sulphur ointment may be applied. Painting the patches with strong carbolic acid at times does good. Chrysarobin and pyrogallic acid in ointments of varying strength will be found useful. In exceedingly obstinate cases the patches may be scarified or removed with a curette or a strong caustic. Multiple puncture with the electrolytic needle is said to give good results. Various other applications are salicylic

acid in ointment or plaster, mercurial plasters, ichthyol, resorcin, and tar.

LUPUS VULGARIS.

Synonyms.—Lupus; Lupus exedens; Lupus vorax; Tuberculosis of the skin.

What is lupus vulgaris?

Lupus vulgaris is a new growth of cellular tissue affecting the skin and contiguous mucous membrane, and manifested by the appearance of yellowish or brownish-red tubercles or nodules which ulcerate and form cicatrices.

What are the symptoms of lupus vulgaris?

In the beginning there is an appearance of yellowish or brownish-red papules, which are imbedded deeply in the skin. These papules are at first imperceptible to the touch, but fade slightly upon pressure. They gradually extend, and appear upon the surface in the form of yellowish or apple-jelly-like tubercles and nodules, which are softer than the healthy tissue, and can be easily punctured by a probe (*lupus tuberculosus*). These characteristic apple-jelly-like nodules are found in all stages of the disease, and may occur about the borders of old ulcerating patches as new foci of development. The tubercular stage of the disease may remain unchanged for a long time or undergo various phases of involution, these phases giving rise to the different varieties of lupus—*e. g.* the tubercles may become absorbed and disappear by atrophy with desquamation (*lupus exfoliativus*), or ulcerate (*lupus exedens*), or exuberant granulations may form (*lupus hypertrophicus*), or warty growths may develop (*lupus verrucosus*). The most common termination is in ulceration (*lupus exedens*). The lupous ulcerations are of irregular shape, with a well-defined margin and a red and bleeding surface, and are rarely painful. The secretion is not abundant, but sufficient to form slight, brownish crusts. Ultimately scars form which are thick, fibrous, and unsightly.

At what age and upon what parts is lupus vulgaris usually found?

It may be found at any age, but it almost always begins in childhood, usually between the third and sixth years. Its common site is the face, especially the nose, but it may appear upon any portion of the body. At times two or more distinct regions

may be affected. It is also found upon the mucous membrane, which it may either affect by extension from contiguous skin or attack primarily.

What is the course of lupus vulgaris?

It is an exceedingly chronic disease, sometimes years elapsing before any great amount of surface is invaded; but it is progressive, and eventually its ravages are extensive.

What is the etiology?

It is supposed to be due to the presence of the tubercle bacillus in the skin, and is most frequently met with in scrofulous or tuberculous subjects, but is sometimes seen in the strong and healthy.

What are the points in diagnosis?

The history of the case, the disease usually beginning in childhood; its long duration; the characteristic yellowish or apple-jelly-like tubercles; ulceration; the firm cicatrices,—all together make the *diagnosis* comparatively easy.

Name the different diseases which resemble lupus vulgaris, and describe their distinguishing features.

The *tubercular* and *serpiginous syphiloderm* usually begins in adult life; the lesions are more widely distributed and develop more quickly; the ulcers are deeper and with clean-cut edges; and the secretion is profuse.

Epithelioma occurs in persons advanced in years: the ulceration begins at a single spot, and there are present none of the characteristic apple-jelly-like nodules. The edges of the ulcer are hard, everted, and undermined. *Lupus erythematosus* does not ulcerate, is a flattened, more or less scaly patch, shows no nodules, and begins later in life.

What is the prognosis?

The *prognosis* is uncertain, and a decided opinion can never be given. While treatment may cure the disease, relapses are apt to occur.

What is the treatment?

The *internal treatment* will depend upon the patient's general condition. No remedies exert a specific action, but the general health must be improved by the administration of cod-liver oil, iron, arsenic, and various tonics, together with good food and outdoor life.

The *local treatment* aims to destroy or remove affected areas. To this end various measures are recommended. In view of the parasitic nature of the disease, Dr. White of Boston has employed with good results corrosive sublimate in solution of a strength of two grains to the ounce, applied to the diseased patches on pieces of lint. The drug may also be used in the form of ointment of the same strength. Salicylic acid, in a 4 to 10 per cent. solution in castor oil, has also been used. For eradication of the disease both chemical means (by the use of caustics) and mechanical means may be employed. The use of caustics is not so general now as it was formerly, but is still suitable in many cases. Nitrate of silver, caustic potash, aresenious acid, pyrogallic acid, nitric acid, and sulphide of zinc are among the favorite caustics employed. Scarification of the patch after the method of Prof. Pick of Prague is doubtless the very best treatment. This is accomplished either with a single-bladed scarifier or, preferably, with the multiple-bladed scarifier—an instrument in which there are three or more parallel blades placed about one-sixteenth of an inch apart. The incisions are made parallel with each other across the patch and just into the healthy skin on either side, care being taken to cut down through the diseased tissue into the firmer sound tissue beneath. The succeeding incisions are made at right angles across the preceding ones, and these may follow each other at intervals of three or four days, the cut surfaces being dressed in the mean time with a simple antiseptic lotion. After several operations the lupous patch will be converted into a soft yielding cicatrix, in which will be seen scattered here and there small pinhead-sized lupous nodules. These are destroyed by introducing into them the small point of a Paquelin cautery, or they may be bored out with a dental burr or punctured with nitrate-of-silver stick. Other methods of removing the disease are by the cautery; scraping out with the dermal curette, afterward applying pyrogallic acid in 30 per cent. ointment; or, when the growth is small, by excision.

LYMPHANGIOMA TUBEROSUM SIMPLEX.

What is lymphangioma tuberosum simplex?

It is an exceedingly rare disease, characterized by the formation of firm, elastic, round lesions, brownish-red in color, and of the size of lentils, which are scattered over the trunk. It is believed to belong to the class of fibroma molluscum.

LYMPHANGIOMA.

What is lymphangioma?

Lymphangioma, or lymphangiectodes, is a dilatation or new growth of lymphatic vessels of the skin. It is usually seen as an aggregation of deep-seated vesicles, of pinhead size, arranged in clusters and patches. Their color is whitish or they may have a pinkish or purplish tint. The patches vary in size from one inch to several inches in diameter, and are usually limited to a single region. It is an exceedingly rare affection, is chronic in its course, and usually begins in childhood. A tendency to recur after removal is noticed.

MILIARIA.

Synonyms.—Lichen trophicum; Prickly heat; Heat rash.

What is miliaria?

Miliaria is an inflammatory disease of the sweat-glands which is distinguished by the development of minute vesicles and papules, and usually occurs upon the trunk.

Describe the clinical appearance of miliaria?

The eruption, which is ordinarily seen upon the trunk, though it may occur elsewhere, appears suddenly and consists of discrete, pinhead-sized, bright-red papules, and is commonly known as prickly heat. At times the eruption is entirely vesicular, or there may be a mixture of papules and vesicles, and in rare instances even pustules. The eruption is usually accompanied with profuse sweating, commonly subsides in a few days, and is followed by desquamation. It is usually accompanied by severe itching, tingling, and burning. Two forms are described, which derive their names from ibe clinical appearance of the eruption: *miliaria rubra*, when the eruption is attended with more or less inflammation, giving to the skin a bright-red hue; and *miliaria alba*, when the inflammatory symptoms have subsided and the contents of the vesicles are more or less opaque.

What is the etiology?

Great heat of any sort is an exciting cause, and the disease is therefore more common in summer. It is seen most frequently in young children and in persons whose general health is impaired.

What disease does miliaria resemble?

The papular and vesicular forms of eczema and sudamen. The

short duration of the disease, the discrete form of the lesions, with no tendency to coalescence, and the mildness of the subjective symptoms will serve to distinguish it from eczema. The presence of inflammation distinguishes it from sudamen.

What is the prognosis of miliaria?

The *prognosis* is good: upon removal of the cause the disease quickly subsides.

What is the treatment?

When practicable, removal of the exciting cause is of the first importance. When this is impossible, as in the excessive heat of summer, attention must be directed toward placing the patient in the most favorable condition to withstand the heat. Light clothing, a light nutritious diet, with tonics as indicated, will aid materially in accomplishing this end. The internal administration of the acetate or citrate of potash, with local applications of dusting powders or cooling and astringent lotions, will be found serviceable.

MILIUM.

Synonyms.—Grutum; Strophulus albidus.

What is milium?

Milium is a disorder of the sebaceous glands, characterized by small, globoid, whitish elevations.

What are the clinical features of milium?

The lesions consist of small millet-seed-sized, whitish, globoid bodies, situated in or beneath the epidermis and somewhat elevated above the surface, looking not unlike little grains of rice imbedded in the skin. They are non-inflammatory and have no subjective symptoms. They occur most frequently upon the face, about the eyes, and upon the cheeks. The same lesions are to be seen upon the penis and scrotum, and are much larger in this location. They develop gradually, and after attaining a certain size remain unchanged indefinitely. The so-called cutaneous calculi are caused by a calcareous degeneration of these bodies. They are often congenital, and are seen upon the eyelids of young infants; they occur, however, at all ages.

What is the treatment?

The little tumor may be removed by cutting through the epidermis which covers it, and digging out the mass within. It some-

times recurs unless the base of the excavation is touched with a mild caustic. The electrolytic needle is highly recommended by some.

MOLLUSCUM EPITHELIALE.

Synonyms.—Molluscum contagiosum; Molluscum sebaceum; Epithelioma molluscum.

What is molluscum epitheliale?

Molluscum epitheliale is characterized by smooth globoid or acuminate elevations, varying in color from yellowish-white to a dark pink, and in size from a millet-seed to a split pea.

Describe the clinical appearance of molluscum epitheliale.

The lesions are firm, roundish bodies, about the size of a pea when fully developed, varying from a waxy, whitish hue to a dark pink color. They are either imbedded in the skin or project from it as semiglobular tubercles, sessile or pedunculated. They are umbilicated, and upon the top of each may be seen a dark-colored spot through which the cheesy contents may be removed on pressure. The lesions are usually few and isolated, rarely more than a dozen being present at one time. They may be shed spontaneously or inflame and suppurate, or terminate by ulceration. They occur upon the face and neck most frequently, but may also occur upon the genitals or other parts of the body.

What is the etiology?

The *cause* is not known. Its contagiousness is not definitely established, though it is often seen in members of the same family, and has been observed affecting numbers of children in asylums where they come into daily contact with one another.

What are the diagnostic features?

The small, flat, pearly or waxy-looking elevations, with the umbilication and central aperture, are characteristic. They somewhat resemble fibroma and verruca.

What is the prognosis?

The *prognosis* is good. The disease is easily cured by removal.

What is the treatment?

The growths may be removed with the curette or they may be slit up with a lancet and their contents expressed. In either case

the base should be touched with a mild caustic to prevent a recurrence. Electrolysis is also effectual.

MORPHŒA.

Synonyms.—Addison's keloid; Circumscribed scleroderma.

What is morphœa?

Morphœa is a cutaneous disease distinguished by one or several variously sized and shaped whitish or ivory-like patches surrounded by a violaceous areola.

What are the clinical features of morphœa?

The lesions consist of one or more variously sized patches tending to an ovalish or rounded contour. They may be slightly elevated above the skin, on a level with it, or somewhat sunken. The surface of each lesion is yellowish, pinkish, or whitish, or may be mottled or pigmented. An individual lesion is said to resemble a plate of ivory let into the skin. The margin is well defined, and is of a violaceous hue, which is produced by a plexus of minute blood-vessels. Occasionally there is slight superficial desquamation, and the centre of the patch may be partly anæsthetic. The disease is, as a rule, unsymmetrical, and is most frequently observed upon the breasts and upon the trunk. It occurs also upon other parts.

What is the course of morphœa?

The *course* of morphœa is chronic, often lasting for years. After a variable duration the disease may undergo involution, leaving the integument perfectly normal, while in other cases atrophy of the skin and subcutaneous tissues takes place, the resulting scar becoming attached to the subjacent structures. Occasionally the disease may assume other features, occurring in bands, streaks, and atrophic pits.

What is the etiology?

It is thought to be due to nerve-disturbance. By many it is regarded as a circumscribed scleroderma.

With what diseases may morphœa be confounded?

With leucoderma and anæsthetic leprosy. In the former the patches are milky white, and the texture of the skin is unchanged. In leprosy the spots are markedly anæsthetic.

What is the prognosis?

The *prognosis* is very uncertain. Some cases terminate favorably after years with no disfigurement, while others persist through life. Treatment has very little effect.

What is the treatment?

The general health may be improved with tonics. Not much good comes from treatment of any kind.

MYCOSIS FUNGOIDES.

What is mycosis fungoides?

It is a rare disease of the skin, characterized by the appearance of soft red mammillated tumors, which may go on to the formation of fungous ulcers.

Describe the symptoms of mycosis fungoides.

At first bright-red, erythematous patches resembling eczema and accompanied with more or less itching make their appearance. These may last for months or years, but finally the infiltration increases, and reddened, thickened plaques are formed. The tumors that constitute the characteristic features of the affection may be developed from these infiltrations or may appear on hitherto unaffected regions of skin. The tumors are of a red or violaceous color, sharply defined, ovalish, and vary in size from a pea to an orange. The surface of these tumors is at first smooth, sometimes slightly scaly. They grow rapidly, and, having attained their development, either undergo involution, becoming retracted, shrivelling up, and disappearing, or become moist and crusted, or break down and suppurate profusely with an ichorous discharge. The lymphatics become involved in most cases. The general health becomes affected after a time, and the patient almost invariably succumbs to the increasing cachexia.

What is the etiology?

The *cause* of the disease is not understood. It most frequently attacks males, and is a disease of adult life.

From what diseases is it to be differentiated?

From eczema in the early stages, and in the later from leprosy and generalized sarcoma.

What is the treatment?

No *internal treatment* is of much value, though arsenic in full

doses has been recommended. Locally, applications of pyrogallic acid are said to do good.

MYOMA.

Synonyms.—Myoma cutis; Dermatomyoma; Liomyoma cutis.

What is myoma?

Myoma is a tumor of the skin which is composed in great part of muscular fibres.

Describe the symptoms of myoma.

There appear one or several pinhead to orange-sized tumors, the skin over which is smooth and glistening and with a rosy or reddish tint. The developed lesions may be sessile or pedunculated, and are either intensely painful and itchy or remarkably sensitive to cold. The disease is a benign new growth. It occurs but seldom, and then between the ages of twenty-five and sixty. When blended with connective tissue it is called *fibromyoma*. *Angiomyoma* is a combination of new growths of blood-vessels with muscular fibres, and a lymphangiomyoma is made up of new growths of lymph-vessels, with a development from their walls of muscular fibre.

NÆVUS PIGMENTOSUS.

Synonym.—Mole.

What is nævus pigmentosus?

Nævus pigmentosus, or mole, is a congenital, circumscribed, pigmentary deposit in the skin, with or without any other structural change, but usually accompanied by more or less hypertrophy of the tissue. These pigmentary deposits are of a yellowish or brownish color, varying in size from a pinhead to a split pea or larger, and may be single or multiple, being sometimes very numerous. They develop quickly, and after attaining their size remain unchanged throughout life. The face, neck, and trunk are the favorite sites, though they may occur elsewhere. The mole has received different names according to its peculiarities of development.

Describe the several varieties of mole.

Nævus spilus is a simple pigmentary deposit in which the skin is otherwise unaltered.

Nævus verrucosus: in which the mole is elevated and wart-like.

This variety is sometimes seen following the course of cutaneous nerves (*nævus unius lateris*).

Nævus pilosus: in which the mole is surmounted by a growth of stiff or downy hairs.

Nævus lipomatodes: in which there is more less hypertrophy of the subcutaneous structure, forming firm or soft projecting tumors.

What is the etiology of nævus pigmentosus?

The *etiology* is unknown. It is usually congenital.

What is the treatment?

The best *treatment* is removal by electrolysis, the method of operating being described under Hypertrichosis. When occurring in elderly people, caustics should not be employed, as moles are often the starting-point for malignant degeneration, and the irritation due to the caustics may precipitate such an outcome.

ONYCHAUXIS.

Synonym.—Hypertrophy of the nail.

Describe onychauxis.

Onychauxis, or hypertrophy of the nail, is not uncommon. The hypertrophy may have reference to the length, width, or thickness of the nail, or to all combined, and these changes are frequently accompanied by changes in color, texture, and shape as well. A condition in which the nail is thickened, rigid, and discolored, and bent forward like a ram's horn, is called *onychogryphosis*. When the hypertrophy is lateral the soft parts are encroached upon, and the pressure excites an inflammation—*paronychia*.

What is the etiology?

It is either congenital or acquired. In the *acquired* form various kinds of traumatism—as, for example, ill-fitting shoes—may give rise to it. It may be due to inflammatory changes in the corium or matrix of the nail, to lack of general hygienic care, or to involvement of the nail with various cutaneous diseases.

What is the treatment?

Treatment consists in removing the causes. When dependent upon any one of the cutaneous diseases, the treatment of this will usually effect a cure. The excessive nail-tissue may be trimmed away with scissors. For *ingrowing nail*, pieces of lint should be inserted between the edge of the nail and the inflamed surface,

and the redundant tissue at the side of the nail should be firmly strapped with adhesive plaster to induce its absorption and disappearance.

ONYCHIA.

What is onychia?

Onychia is an inflammation of the matrix of the nail. The disorder is manifested by pain and swelling, and in severe cases the extremity of the affected member becomes livid and the nail becomes detached at the sides, and exposes an ulcerated surface from which pus escapes.

What are the causes of onychia?

The most frequent *causes* are traumatism, syphilis, leprosy, eczema, and other cutaneous diseases.

What is the treatment?

Division of the nail in the early stage will often relieve the pain and tension. In the ulcerative stage complete removal of the nail and a dressing of the matrix with iodoform will be necessary. Internal *treatment*, if necessary, must be governed by the indications.

PAGET'S DISEASE OF THE NIPPLE.

What is Paget's disease of the nipple?

Paget's disease of the nipple, or malignant papillary dermatitis, is a malignant disease of the nipple closely resembling eczema in its beginning, and finally developing into cancer.

What are the clinical features of Paget's disease?

It begins like an eczema, affecting the nipple and areola. The surface, after a longer or shorter period, becomes denuded of epithelium, and has a very red, raw-looking, granular appearance, and exudes a profuse, clear, viscid secretion. The disease is attended by intense itching, heat, and burning. The edge of the surface is clearly marked out, and is somewhat elevated. After a time considerable infiltration into the surrounding tissues may take place. Finally, the nipple retracts, and the entire gland becomes affected with unmistakable signs of cancer. It usually occurs in women from the fortieth to the sixtieth year of age.

What can you say as to the nature of Paget's disease?

It is generally believed to be a cancerous disease from the begin-

ning, at first involving the mouths of the lactiferous ducts, and thence spreading to the skin, nipple, and deeper gland structures. Some authors hold, however, that it is due to a previous excessive local irritation in a person predisposed to cancer.

How would you distinguish Paget's disease?

It is exceedingly difficult to distinguish it in its earlier stages, on account of its close resemblance to eczema. In Paget's disease, however, only one nipple is affected, the diseased area is sharply defined, somewhat elevated and indurated, and the surface is raw, red, and granulating. Later, when the nipple retracts and the various signs of cancer are present, the disease is unmistakable.

What is the prognosis?

The *prognosis* will depend upon the early recognition and complete removal of the disease. Unless it is recognized in its early stages it is apt to terminate fatally.

What is the treatment?

In doubtful cases it is well to try soothing applications. If, in spite of these, the disease remains unchanged or progresses, complete extirpation of the gland by use of the knife should be at once resorted to.

PEDICULOSIS.

What is pediculosis?

Pediculosis, phtheiriasis, or lousiness, is a disease of the skin due to an animal parasite, the pediculus or louse. There are several varieties of pediculosis, named from the particular region affected in each case, and each variety is due to a separate and distinct species of pediculus.

Name the several varieties, and describe the clinical features of each.

Pediculosis Capitis.—This is the most common variety. It is most frequently seen affecting the heads of children, especially of the lower classes, and the uncleanly. The parasite of this variety is the *Pediculus capitis*. The eruption, which is especially seen over the temporal and occipital regions, is attended by intense itching, and the lesions, which are due quite as much to the scratching as to the irritation from the pediculus, consist in the beginning of papules, vesicles, pustules, and excoriations variously intermingled. Later, more or less crusting takes place, and the process becomes in reality a pus-

tular eczema. The neighboring lymphatics are often involved, and vesicles and pustules may be found on the skin outside the border of the scalp. The *ova* or *nits* are seen as little ovoid whitish bodies firmly attached to the shafts of the hairs. The ova are deposited by the female upon the shaft of the hair near the scalp, where they mature. The young escape from the ova in from three to nine days, and are capable of reproduction in about nine days more.

Fig. 22.

What is the diagnosis?

As a rule, the *diagnosis* is easily made. Pustular eczema occurring upon the occipital region of a woman or child is generally of parasitic origin. Even if no pediculi are to be found, the presence of the nits upon the hairs will be sufficient to establish a diagnosis.

What is the treatment?

Any of the parasiticides may be used. Equal parts of kerosene and olive oil soaked into the scalp for one or two nights will often be sufficient. To loosen the ova repeated washings in vinegar or in a solution of boric acid, or applications of ether, will be efficient.

Fig. 23.

Pediculosis Corporis, or pediculosis vestimentorum, is due to the *Pediculus corporis*, a larger variety than the Pediculus capitis. It usually occurs in adults, and the parasite finds its habitat in the clothing, where it deposits its ova and develops, using the skin only as a feeding-ground. The bite of the parasite consists of a small hemorrhagic spot surrounded by a reddish areola. The lesions, which are attended by intense itching, consist of papules, pustules, and scratch marks, and are found most plentifully over the shoulders, buttocks, and about the waist. Upon these parts are often found long parallel excoriations which are characteristic. In long-standing cases the skin may become thickened, infiltrated, and pigmented.

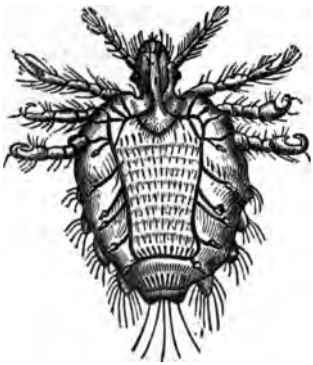
What is the treatment?

Treatment consists in destroying the lice and their ova. Sub-

jecting the clothing to intense dry heat or boiling will prove effectual. When necessary soothing applications may be made to the skin to relieve the irritation.

Pediculosis Pubis.—This is seen usually about the genitalia, but it may be found upon any hairy part. It is caused by the *Pediculus pubis*, or crab louse. The parasite is smaller than either of those previously mentioned, and is seen firmly clinging to the hair with its head buried in the follicular opening: it is very tenacious and is removed with difficulty. The ova likewise are firmly fastened to the hairs. The disease is usually transmitted through contact during the sexual act, but it may be acquired through the medium of beds previously occupied by infected persons. It is most often seen in adults. The itching is less severe than in the other varieties, and the attending lesions are often wanting; when present they often amount to no more than a slight eczema induced by scratching. The location of the eruption and the presence of the pediculi and their ova will serve to distinguish the affection from eczema and pruritus.

FIG. 24.



What is the treatment?

Any of the preparations of mercury in ointment are efficacious, but are uncleanly and disagreeable to use; it is therefore better to use a solution of corrosive sublimate, from three to four grains to the ounce. Balsam of Peru and olive oil, equal parts, are also effectual. The application should be made for two or three days before the parts are washed; then a thorough cleansing with soap and water will complete the cure.

PEMPHIGUS.

What is pemphigus?

Pemphigus is an acute or chronic inflammation of the skin in which crops of bullæ of various sizes succeed one another. The two principal varieties are *pemphigus vulgaris* and *pemphigus foliaceus*.

Describe pemphigus vulgaris.

The eruption may or may not be preceded by prodromal symptoms, and begins with an outbreak of small vesicles, which rapidly grow to form bullæ the size of a walnut or larger, or several bullæ may coalesce, forming large irregular blebs. The bullæ may appear on unaffected skin or be preceded by local erythema at the point of eruption. They are tense and filled with clear serum, which later becomes lactescent, or the contents may be bloody (*pemphigus hæmorrhagicus*). Spontaneous rupture is uncommon, the contents being usually absorbed, leaving a slight crust. In favorable cases the disease lasts from four to six weeks, new lesions appearing and disappearing throughout its course. The individual lesions usually last about a week. In the more chronic cases this process may continue indefinitely. The eruption may affect any part of the body, sometimes appearing upon the mucous membrane. The face, hands, and feet are often exempt.

Pemphigus malignus is a name given to a much more severe form of the disease. The lesions are more abundant, there is often diphtheritic deposit about them, and they may even ulcerate. This form is attended by grave constitutional disturbance.

Describe pemphigus foliaceus.

This variety is much more rare and grave than the former. The blebs are never tense, but loose and compressible. Their contents is more or less cloudy from the beginning. The blebs soon rupture, and when the covering is removed a raw surface is exposed which is moistened with a sticky secretion. The disease spreads slowly, but eventually the entire surface is affected. The conjunctiva, mucous membrane of the mouth, throat, and vagina may be affected, and the nails ridged or even cast off. The disease progresses, and finally terminates fatally.

What is the etiology of pemphigus?

This is unknown. No age is exempt, but it is more common at the extremes of life. It is generally seen in debilitated patients and in those suffering from impaired nutrition and lowered vitality. Severe mental worry or nervous strain of any kind is said to be influential. It is not contagious.

With what diseases may pemphigus be confounded, and how may it be distinguished?

The bullous form of erythema multiforme, the bullous syphiloderm, impetigo contagiosa, and dermatitis herpetiformis. In *ery-*

thema multiforme are found, in addition, papules without the bullous formation. In the *bullous syphilide* the history or other symptoms of syphilis are almost invariably present. *Impetigo contagiosa* is never so extensive, and the contents of the lesions are contagious. The eruption of *dermatitis herpetiformis* is made up of various forms of lesions which tend to group, and is accompanied by intense itching.

What is the prognosis of pemphigus?

The pemphigus of children and the acute form generally admit of a favorable *prognosis*. In the chronic form it is less favorable, and will depend upon the general condition of the patient and the severity of the affection. Pemphigus foliaceus is invariably hopeless.

What is the treatment?

General tonic and hygienic *treatment*, with nutritious food, is always indicated. Arsenic is said by some to have a specific effect. Locally, the application of soothing ointments or dusting powders after the blebs are opened is recommended. The continuous bath is said to do good.

PELLAGRA.

Synonym.—Lombardian leprosy.

What is pellagra?

Pellagra is a slow but progressive endemic disease which occurs principally in Italy. It is supposed to be due to eating spoiled or fermented maize or to drinking spirits made from maize. It occurs principally in men. The eruption, which affects the backs of the hands, forearms, neck, face, and chest, consists of an erythema of a dull livid hue, and is accompanied by desquamation. After repeated relapses the skin becomes of a dark brownish-red or bluish-red, and the epidermis is exfoliated in large flakes. The affection is preceded by malaise and more or less febrile symptoms, which gradually grow more severe as the disease progresses, when gastro-intestinal and cerebral symptoms ensue. It is chronic in its course, and unless treated early on general principles terminates fatally.

PERFORATING ULCER OF THE FOOT.

What is perforating ulcer of the foot?

It is quite a rare affection, and consists of a chronic ulcerative process occurring on the plantar surface of the foot and extending

down to diseased bone. It usually occurs near the metatarso-phalangeal articulation of the great or little toe. Its mode of formation is as follows: At some point of pressure a corn-like process forms, the tissue beneath which inflames and suppurates, and forms an ulcer which tends to progress through the soft parts down to the bone. The ulcer has hardened edges and is usually painless. Accompanying the process are more or less anæsthesia, neuralgic pains, and coldness of the feet. The disease is due to a defect in nutrition caused by the disease of the nerve-twigs supplying the part. One or more ulcers may be present.

What is the treatment?

The use of stimulating and antiseptic dressings, with the internal administration of iron and arsenic, will prove beneficial. Amputation may be practised in advanced conditions. Galvanism will improve the nutrition of the part.

PITYRIASIS MACULATA ET CIRCINATA.

What is pityriasis maculata et circinata?

Pityriasis maculata et circinata, or pityriasis rosea, is an inflammatory disease of mild type which appears as multiple pinkish or salmon-colored macules and circinate patches, which are seen upon the trunk, especially the upper portion, and upon the neck, rarely occurring elsewhere.

Describe the clinical appearance of pityriasis maculata et circinata.

The eruption appears in the form of variously-sized, slightly elevated, pinkish or reddish macules or patches, covered with furfuraceous scales. As they advance in age the color fades to salmon or brownish yellow, the patches extend peripherally, while the centre clears, giving to them a well-defined ringed appearance. Occasally two or more patches coalesce, when the border assumes a gyrate form. The lesions are superficial, and are without infiltration into the surrounding tissue. The eruption is sometimes preceded by a mild febrile disturbance. The lesions generally appear rather quickly, and disappear spontaneously in from two to six weeks.

What is the etiology?

The *etiology* is obscure. It is supposed, however, to be a mild type of eczema seborrhœicum.

From what diseases must pityriasis maculata et circinata be differentiated? and how does it differ from these?

From ringworm, psoriasis, and syphilis.

It differs from *ringworm* in its rapid development, in the absence of vesicles or marked scaling, in its location, in the number of its lesions, and in the absence of spores on microscopical examination.

From *psoriasis* in the latter's general and symmetrical distribution, its abundant scales, its thickening of the skin, and the chronicity of its course.

The *squamous syphiloderm* is more general, the lesions are smaller and of a different color, and there are always some other symptoms of syphilis present.

What is the prognosis?

Always good. The disease usually disappears without treatment in from two to six weeks.

What is the treatment?

Treatment is seldom necessary. An ointment of sulphur and salicylic acid, of each 5 per cent., may be used to hasten the disappearance.

PODELCOMA.

What is podelcoma?

Podelcoma, Madura foot, fungous foot, or mycetoma, is a rare endemic disease common in certain parts of India. It generally attacks the foot or leg, though the hand or other part of the body may be affected. It begins insidiously as a hard, painless swelling which is covered with pea-sized vesicles and elevations, in which, after a time, abscess-like formations occur, and each elevation then represents the opening of a sinus from which exudes a sero-purulent fluid, together with black granules or roe-like masses. When the disease is fully developed the affected parts become greatly swollen and distorted and filled with fistulous openings. It is said to be due to a specific fungus.

What is the treatment?

Thorough removal of the disease by means of the curette and dressing with antiseptics will usually suffice. When extensive, amputation will be necessary.

POMPHOLYX.

Synonyms.—Cheiro-pompholyx; Dysidrosis.

What is pompholyx?

Pompholyx is characterized by the formation of vesicles and bullæ, occurring usually upon the hands and feet. It is of rare occurrence.

What are the symptoms of pompholyx?

The eruption makes its appearance, accompanied by more or less itching, tingling, and burning, as minute vesicles deeply imbedded in the skin and showing no tendency to rupture. These vesicles gradually become more prominent, and resemble little sago-grains. As the process advances the contents of the vesicles become yellowish, and the vesicles extend in size and by coalescence form blebs. If the eruption is left undisturbed, the fluid is partly absorbed and partly evaporated, and the cuticle peels off, leaving non-discharging, reddened areas. The skin about the lesions is usually swollen and painful. Occasionally the disease does not progress beyond the formation of the vesicles, the contents of the vesicles being absorbed, leaving little red spots of dead epidermis to mark their site. The disease usually occurs upon the palms and soles and interdigital surfaces.

What is the etiology of pompholyx?

Pompholyx is generally conceded to be due to nervous debility, and is more commonly seen in women than in men.

What is the pathology?

It is a disease of the sweat-glands of a neurotic origin.

From what diseases is it to be differentiated?

From scabies, eczema, and pemphigus. The deep-seated vesicles, resembling sago-grains, and the peculiar course of the disease, limited to the hands and feet, make it easy of diagnosis.

What is the prognosis?

An outbreak of the eruption is usually amenable to treatment, but the tendency to recur is difficult to overcome.

What is the treatment?

The internal administration of iron, arsenic, strychnine, and cod-liver oil and other tonics, together with nutritious food and a proper hygiene, will prove of the greatest service. Locally, astringent or soothing applications adapted to the stage of the disease.

PRURIGO.

What is prurigo?

Prurigo is a chronic inflammatory disease which begins in childhood, and appears as small, slightly elevated, discrete, pinkish papules, with infiltration, attended by intense itching.

What are the symptoms of prurigo?

The disease begins usually in the form of urticarial wheals, which are followed after a time by a papular eruption. The papular eruption consists at first of small, solitary papules about the size of a hempseed, a little elevated and of the color of the skin, being therefore more readily felt than seen. They are exceedingly itchy, and from scratching increase in size and number and become darker in color and excoriated or capped with little blood-crusts. From the continued scratching the skin becomes dark and pigmented, thickened, rough, and infiltrated. The eruption is always worse upon the extremities and most marked upon the extensor surfaces; it also occurs upon the trunk, but is never so severe in this location. The face and scalp, flexor surfaces of the joints, palms, soles, scrotum, and penis are usually free. In aggravated cases there is an exaggeration of all these symptoms, suppuration of the papules takes place, artificial eczema is produced, and the neighboring lymphatic glands, especially in the inguinal region, become enlarged. The constant intense itching, which at times is almost intolerable, is the prominent feature of the disease.

What is the etiology?

The disease is seen most frequently in Austria, and but rarely in this country, and then only in the milder form. It is not contagious, and occurs more often in the male sex. Scrofula, tuberculosis, and malnutrition from poor or insufficient food favor its development.

What are the diagnostic features of prurigo?

Its history, its extreme chronicity, the extent of the eruption, and the enlarged glands make it easy of diagnosis.

What is the prognosis?

The disease, when seen early under favorable conditions, may be cured, but as a rule it persists throughout life in spite of treatment.

What is the treatment?

As it is essentially a disease of the poorly-nourished, proper food,

hygienic surroundings, and the administration of tonics and cod-liver oil are of the greatest importance. Pilocarpine hypodermically, and tinct. cannabis Indicæ by the mouth, have been used to lessen the pruritus, and, it is said, with beneficial results. Locally, ointments of salicylic acid, sulphur, tar and β-naphthol are beneficial. Hot and cold plain water or medicated baths are sometimes useful.

PRURITUS.

What is pruritus?

Pruritus is a disorder of the skin characterized by more or less severe itching and without alteration in structure.

What are the clinical features of pruritus?

The *symptoms* of pruritus are various. Sometimes there is only slight itching of an intermittent character, and sometimes the itching is constant and almost unbearable. Again, there will be no real itching, but crawling, creeping, or pricking sensations, as though insects were present on the skin. In nearly all instances the pruritus is worse at night. The secondary changes, which are seen in exaggerated cases, are not due to the disease, but are caused by scratching, and may vary from a simple erythema to papules, pustules, pigmentation, and infiltration. Pruritus is seen at all ages and in both sexes, but the exaggerated forms are most frequently met with in middle-aged or elderly people (*pruritus senilis*). There are localized forms of pruritus which are named from the region affected (*pruritus ani*, *pruritus scroti*, *pruritus vulvæ*). *Pruritus hiemalis*, or *winter itch*, is sometimes described as a separate affection, but it is doubtless a peculiar manifestation of the same disease. It has many of the characteristics of the ordinary pruritus, but occurs principally in younger persons and only in winter, disappearing during the warm weather of summer, to reappear the following autumn. It may be quite general over the surface, but usually attacks principally the inner surfaces of the thighs, the calves of the legs, and the neighborhood of the joints of the lower extremities.

What is the etiology of pruritus?

The *causes* of pruritus are varied. In the aged it is usually due to senile changes in the skin. Among the common causes may be mentioned functional and organic changes in the liver and kidneys, dyspepsia, constipation, and various disorders of the nervous sys-

tem. *Pruritus vulvæ* is often caused by the irritation from saccharine urine, vaginal discharges, or by the presence of ascarides in the vagina or rectum. *Pruritus ani* may come from ascarides, chronic prostatitis, hemorrhoids, fissures, or disease of the rectum.

What is the diagnosis of pruritus?

The *diagnosis* of general pruritus is usually easier than that of the localized forms, as the secondary changes are not so great. Frequently there is nothing whatever to be seen upon the skin, the intense itching of which the patient complains being the only symptom. Pediculosis corporis may be mistaken for this form of the disease, but the itching of the former is worse during the day when the clothing is worn. The presence of the pediculi will of course decide the question. When secondary changes have taken place, the parallel scratch-marks of pediculosis are characteristic. When the localized forms are complicated by eczema and dermatitis, the primary disorder is often difficult to determine, though the history will aid in forming an opinion.

What is the prognosis?

Pruritus senilis is always a rebellious disorder, and when caused by senile alteration in the tissue is incurable. The other forms of the disease are usually amenable to treatment, though the *prognosis* should always be guarded.

What is the treatment?

The *general treatment* of pruritus consists in the employment of measures for the cure of the exciting or complicating disorders. The internal administration of the various nerve-tonics, or of belladonna, pilocarpine, carbolic acid, tincture of gelsemium, cannabis Indica, phenacetin, and antipyrine, is said to be serviceable. To relieve the itching local remedies may be employed, and in some instances these alone will effect a cure. Among the important antipruritic applications are the following:

Baths, alkaline or acid, or those containing bran or starch or of the natural sulphur waters. Solutions of carbolic acid, 1–5 per cent.; resorcin, 1–5 per cent.; thymol, ½–1 per cent., used preferably in a spray; chloroform; solution of menthol, 1–3 per cent.; creolin solution, 2–5 per cent.; a lotion containing 20 per cent. oil of cade in alcohol; and the various dusting powders. When the skin is dry, any of the foregoing may be embodied in an ointment instead of a solution. In *pruritus ani* I have had excellent results from local galvanization. In *pruritus vulvæ* the various antipruritics

already mentioned may be employed. In this locality an ointment or lotion containing 4 per cent. cocaine is especially valuable. When the disease is due to vaginal discharges astringent injections are of service.

PSORIASIS.

What is psoriasis?

Psoriasis is a chronic non-contagious, inflammatory disease of the skin, appearing as variously-sized lesions which have red bases and are covered with white silvery scales.

Upon what parts is it usually found?

The eruption is usually general, but is more abundant upon the extensor surfaces. The palms and soles are usually free, but the scalp is almost invariably affected.

Describe the clinical appearance of psoriasis.

The lesions may be few or many, and vary in size from a pea to a silver coin, or several may coalesce and form large irregular patches. Each lesion begins as a small reddish spot, which gradually extends peripherally until it attains the size of a small or large coin. It is infiltrated, slightly elevated, sharply defined, and covered with more or less thick white or silvery imbricated scales, which are easily detached and upon removal disclose fine bleeding points. Involution may take place when the lesion is fully developed, and the disappearance begins in the centre, which entirely clears up, leaving a circinate patch which ultimately disappears. The distribution of the eruption is always symmetrical, and the lesions are usually more abundant on the extensor surfaces. The eruption is always dry, and is unaccompanied by constitutional disturbance. There is sometimes a slight itching present.

At what age does psoriasis usually occur?

It usually begins in childhood, and continues throughout life with remissions. It rarely occurs the first time after the fortieth year.

What is the course of psoriasis?

Psoriasis is a chronic affection. It may continue with remissions throughout life, one or two attacks occurring each year, though sometimes the interval between the attacks is much longer. Some cases are never entirely free from lesions.

What are the several clinical varieties of psoriasis?

As usually seen, the patches are in various stages of development, and the varieties are named from the form which the majority of the lesions formed have assumed: *psoriasis punctata* when the papules are pinhead in size; *psoriasis guttata* when as large as a bean or drop; *psoriasis nummularis* when of the size of coins; *psoriasis circinata* or *orbicularis* when the patches have healed in the centre, leaving a ring of eruption; *psoriasis gyrata* when the rings touch each other at different portions, fading at the points of contact and assuming a gyrate form; *psoriasis diffusa* when through the extension and coalescence of several lesions a large area of skin is involved.

What is the etiology of psoriasis?

The *causes* of psoriasis are unknown. It is non-contagious, occurs in both sexes alike, and is found in persons of every social condition. It is often influenced by heredity. The same general conditions which underlie the development of gout and rheumatism are doubtless influential in its production.

What diseases does psoriasis resemble? and how is it distinguished from them?

Squamous eczema, eczema seborrhœicum, the papulo-squamous syphilide, and seborrhœa.

Squamous Eczema.—From this disease it is distinguished by the general and symmetrical distribution of the eruption, the sharply-defined patches covered with thick silvery scales, and the course and history of the disease.

Eczema Seborrhœicum.—The lesions of this eruption are usually not so abundant and are not so symmetrically disposed, the scaling is less, and has not the silvery whiteness of psoriasis. There is marked predilection for the region over the sternum and between the shoulders, but not for the extensor surfaces. The history and course of the lesions will aid in differentiating.

The Papulo-squamous Syphilide.—In this affection the scales are not so thick, are of a grayish color, more adherent, and do not always extend to the border of the patch. The papules are darker in color and with greater infiltration, feeling like little lumps of flesh in the skin; the palms and soles are usually affected, and other symptoms of syphilis are generally found.

Seborrhœa resembles psoriasis only when the latter occurs upon the scalp. There are, however, no individual patches in seborrhœa,

the scaliness being general. Then, too, psoriasis rarely occurs upon the scalp alone, lesions existing upon other portions of the body where seborrhœa is never found.

What is the prognosis of psoriasis?

The *prognosis* is usually favorable as regards any given attack, but recurrences are apt to take place. Immunity from recurrence can never be guaranteed, though an outbreak may usually be readily cured by appropriate treatment. Sometimes an absolute cure may be effected, though this is not the rule. Much may be done to lessen the liability to relapses.

What is the treatment of psoriasis?

In all cases exercise and strict attention to the diet are essential. In some cases constitutional remedies are beneficial, but of most importance is the local treatment, together with diet. It is very doubtful if there are any remedies which exert a specific action in psoriasis, and the internal administration of drugs will be chiefly directed to meet the indications of the general condition. *Arsenic*, in the form of arsenious acid or Fowler's solution, is serviceable as a tonic, and is said to have some specific control over the eruption, being especially indicated when the disease is chronic. *Iodide of potassium* is also recommended. It may be used, together with alkalies and colchicum, when there is an evident rheumatic or gouty tendency. The various tonics are used whenever the system demands them, and may be selected to meet indications.

The *local treatment* is directed to the removal of the scales and to relieving the inflammation and infiltration. Hot plain water or medicated baths, with soap frictions, are the simplest and most efficacious methods of removing the scales. At times, in the acute progressive stages of the disease, soothing applications are of the greatest service, but as a rule stimulating ointments or lotions are called for. *Chrysarobin* is the most effectual drug of this class, and is used in a 3 to 5 per cent. ointment or solution in chloroform. It has the disadvantage, however, of staining the skin and clothing a dark reddish brown, and of exciting a severe conjunctivitis if applied too near the eyes. It should therefore not be used upon the face or head, nor upon tender portions of the skin except with great caution, as it sometimes causes a dermatitis. The various preparations of *tar* may be used to advantage, though they are generally slow in their action. Ointments of ammoniated mercury,

resorcin, aristol, salicylic acid, and sulphur are all recommended, and may be employed in different cases.

PURPURA.

What is purpura?

Purpura is a disease which is distinguished by the appearance in the skin of reddish or purplish discolorations, which vary in size or shape and do not entirely disappear under pressure. The lesions appear slowly or suddenly in the form of variously sized and shaped bright-red macules or patches, which later undergo the varying changes of color seen in the involution of a bruise. They usually last from one to two weeks. According to the size, form, and shape of the lesions they have received special designations, as follows:

Petechiæ when they are pin-point to pin-head in size;

Vibices when they occur in streaks;

Ecchymoses when they occur in variously-sized blotches;

Ecchymomata when the hemorrhage produces tumefaction.

Three varieties are usually described—*purpura simplex*, *purpura hæmorrhagica*, and *purpura rheumatica*.

Describe the symptoms of purpura simplex.

This is the mildest form of purpura, and shows itself usually as petechiæ, though the other lesions just mentioned may be present. The disease may attack any portion of the body, but shows a special predilection for the lower extremities. The eruption appears in successive crops, and may be prolonged for a considerable period in this way. The general health is rarely affected, and subjective symptoms are usually absent.

Describe the symptoms of purpura hæmorrhagica.

Purpura hæmorrhagica is a severe type of the simple variety, and may develop from it. Usually there is more or less systemic disturbance, which precedes and accompanies the eruption. The lesions are much larger than in purpura simplex, and usually first appear over the upper extremities and trunk. Hemorrhage from the mucous and serous surfaces, varying in degree, is usually present. The disease progresses slowly, and may last for several months, though it usually terminates favorably. Hemorrhage into the cranial cavity may cause speedy death, and in other severe cases the continued loss of blood will lead to a fatal issue.

Describe the symptoms of purpura rheumatica.

By some writers this variety is considered a distinct disease. It is described in this connection, however, because the hemorrhage into the skin is its distinctive feature. The eruption is generally preceded by febrile disturbance and the usual symptoms which usher in a rheumatic attack. After two or three days the eruption appears. The lesions, which usually consist of petechiæ, are most plentiful upon the limbs. Occasionally upon the advent of the eruption the other symptoms disappear, and sometimes their order of appearance is reversed. Among the rare complications are bleeding from the mucous membranes, albuminuria, and valvular murmurs. It occurs in young people of both sexes, but especially in women. The duration of the disease varies. It may subside after one attack, or through repeated relapses may continue for months.

What is the etiology of purpura?

The *causes* of purpura are unknown. It may occur at any time of life in both sexes and under different conditions of health. It sometimes follows erythema nodosum.

What are the characteristic features of purpura?

The non-inflammatory character of the lesions, which are not elevated above the surface, which do not entirely disappear under pressure, and which undergo, during involution, the varying changes of color characteristic of a bruise. Purpura may be distinguished from *scorbutus*, or *scurvy*, by the mode of its development and its history. Scurvy is usually accompanied by severe general symptoms, depression of the system, and a characteristic hemorrhage and a swollen condition of the gums, which are covered with a foul secretion emiting an offensive odor.

What is the prognosis?

In the simple forms the *prognosis* is good, and in the majority of cases even the severer types recover, but the possibility of a fatal termination must be borne in mind, and the prognosis should be guarded.

What is the treatment?

The mild cases seldom require any *treatment*. Internally, the use of iron, quinine, strychnine, and cod-liver oil, with a nutritious diet and attention to hygienic measures, will prove serviceable in all cases. Certain drugs are said to have a special effect in reliev-

ing the disease. Among these are the mineral acids, gallic acid, ergot, and turpentine.

PUSTULA MALIGNA.

Synonym.—Anthrax.

What is pustula maligna?

Pustula maligna is a gangrenous condition of the skin caused by inoculation with virus containing the bacillus anthracis. This bacillus is found in animals affected with splenic fever or "*charbon.*" The disease begins two or three days after inoculation with a red papule, upon which a vesicle or pustule develops. This soon ruptures, leaving a black gangrenous surface. The gangrenous process may spread rapidly, being accompanied by symptoms of acute septic infection, and cause death in one to six days. In favorable cases the slough is cast off and replaced by a cicatrix.

What is the treatment?

Removal by thorough excision or the actual cautery. The general strength must be maintained by the administration of tonics and stimulants.

RHINOSCLEROMA.

What is rhinoscleroma?

It consists of a hard, circumscribed, nodular or flattened new growth of cellular tissue, situated about the alæ of the nose or the septum. It may originate in the naso-pharyngeal cavity, on the arches of the palate, or even in the larynx. The color of the patch varies from the natural color of the skin to a dark brown. Small blood-vessels are usually seen ramifying over the surface. It is somewhat elastic to the touch, and of a hardness which has been likened to cartilage. It increases gradually in size and invades neighboring parts. It is most commonly seen in Austria and Germany.

Treatment consists in removal of the growth, but it is seldom successful, as the disease is apt to recur. It is purely a local condition and never affects the general health.

SARCOMA CUTIS.

Describe sarcoma of the skin.

Sarcoma of the skin is characterized by the occurrence, as either

primary or secondary developments, of variously sized and shaped pigmented or non-pigmented tumors occurring singly or in numbers. They are smooth and hard, of a reddish, violaceous, or brownish-red color; malignant in character, but with a marked inaptitude for ulceration. In the pigmented form the dorsal surfaces of the hands and feet or the palms and soles are the parts primarily attacked. The growths develop rapidly, and the disease usually terminates fatally after several years. It generally occurs toward middle age.

What is the treatment?

The hypodermic injection of Fowler's solution in increasing amounts has been successful in some instances. Extirpation is always followed by recurrence.

SCABIES.

Synonym.—Itch.

What is scabies?

Scabies is a contagious disease due to an animal parasite, and is distinguished by the formation of various lesions, which show a predilection for certain regions, and which are accompanied by severe itching.

What is the cause of scabies?

Scabies is due to the presence in and on the skin of an animal parasite, the *Acarus scabiei*. The male acarus lives on the surface and does not enter the skin. The impregnated female, however, penetrates the epidermis, producing a little tortuous or zigzag tunnel called a *cuniculus* or *burrow*. In this burrow she lays her eggs, two dozen or more, depositing one or two daily, and finally dies. The eggs hatch out in from five to fourteen days; the young escape to the surface, when the same process is repeated. These burrows appear to the eye as tortuous, slightly elevated, dotted, yellowish or whitish lines about one-fifth of an inch in length, and are usually found where the skin is thin and soft. In many cases, owing to the secondary changes produced by the irritation of the parasite and by scratching, the burrows cannot be detected.

What are the symptoms of scabies?

The *objective* symptoms of scabies consist of the primary lesions, such as papules, vesicles, and pustules, caused by the irritation due to the presence of the acarus and its burrows, and also of the

secondary changes due to scratching. The secondary changes vary in degree from simple excoriation to severe dermatitis. When scabies affects persons with a tender skin, the excessive irritation will sometimes produce an eczema—especially so if the patient is predisposed to that affection—and the characteristic features of

FIG. 35.

scabies will be obscured. The *subjective* symptom of scabies consists of intense itching, which is usually much worse at night. The eruption will be found in greatest abundance on the webs between the fingers, on the interdigital surfaces, on the flexor surfaces of the wrists and forearms, about the axillæ, in the groin, on the penis and scrotum in the male, and about the nipples in the female. The disease is contagious, and is usually contracted by sleeping with a person having the disease or in a bed previously occupied by an infected person. Without treatment the disease will persist indefinitely.

What is the diagnosis of scabies?

The burrows, the localization of the eruption, its presence upon the penis in the male and about the nipples in the female, its intense itchiness, especially at night, and the history of contagion.

What diseases may be confounded with scabies?

Vesicular and pustular eczema and pediculosis corporis. The eruption in eczema is not usually so extensive, has no predilection for special sites, occurs in patches, and is not contagious. Pediculosis corporis occurs most profusely where the clothing comes in close contact with the body, as around the waist and on the shoulders and buttocks, and the presence of the parallel scratch-marks upon the skin are characteristic; moreover, it never occurs upon the hands.

What is the prognosis?

Invariably good. The disease speedily disappears under appropriate treatment.

What is the treatment?

The *treatment* should be inaugurated by a thorough soap-and-hot-water bath, in order to soften the skin and thus to allow an easier penetration of ointments that may be applied. Any of the following may be used: Sulphur, 5–10 per cent. in ointment; styrax 10–30 per cent. in ointment; β-naphthol, usually combined with sulphur; balsam Peru, also usually combined with sulphur. The applications must be continued for a week or more to get rid of the parasites which may hatch out during treatment.

SCLEREMA NEONATORUM.

What is sclerema neonatorum?

Sclerema neonatorum, or sclerema of the newborn, is a rare disease, usually making its appearance within three or four days after birth. It generally begins upon the extremities and gradually extends to the trunk and face. The skin becomes cold, hard, and rigid, and has been likened to that of a corpse. The child becomes emaciated, the pulse and respiration fail, and death soon ensues. The disease consists in a drying up of the skin, a thickening of its layers, and atrophy of the fat. It differs from œdema of the newborn, with which it is frequently confounded, in that in this latter affection there is œdematous infiltration of the subcutaneous tissue, the skin has a livid and shining aspect, and pits on pressure. The

œdema is most marked at dependent parts of the body. Sclerema neonatorum usually occurs in weakly and ill-nourished infants or in those prematurely born. In some instances there have been evidences of a syphilitic taint.

What is the prognosis and treatment?

The *prognosis* is unfavorable; but few cases ever recover.

The *treatment* consists in suitable nourishment and in endeavors to keep up the temperature by artificial heat.

SCLERODERMA.

What is scleroderma?

Scleroderma is a disease distinguished by circumscribed or general induration, rigidity, fixation, and subsequent atrophy of the skin. The affected parts may be waxy, yellowish-white, or pigmented.

What are the symptoms of scleroderma?

The disease is usually chronic, and presents itself as a hardening or rigidity of the skin, either as variously sized, irregular patches or bands or as a uniform and more extensive involvement. It has a preference for the upper portions of the body, beginning usually on the chest, neck, shoulders, or arms. It may spread over large areas and it is usually symmetrical. The skin is shining, tense, hard, infiltrated, pigmented, and immovable upon the underlying structures. The patches are neither elevated nor depressed, and merge gradually into the healthy skin. The mucous membranes may also be affected. The general health, as a rule, is not affected. Having, after months or years, reached the acme of development, the disease may remain stationary for a variable time or it may undergo spontaneous involution.

What is the etiology?

The *etiology* is obscure. It is a rare disease, and is usually regarded as a trophoneurosis. It is most frequently seen in the female sex, and occurs chiefly in adults.

What are the diagnostic features?

The rigidity, hardness, and immobility of the skin are characteristic, and make the diagnosis easy.

What is the treatment?

Treatment is unsatisfactory. Tonics and good hygienic measures

are of the greatest importance. Locally, massage and electricity have been recommended.

SCROFULODERMA.

What is scrofuloderma?

Scrofuloderma is an affection of the skin which is characterized by ulcerative changes in its structure, associated with involvement of the lymphatic glands, and which occurs in persons of a strumous habit. As commonly seen, the scrofulous ulceration occurs about the face and neck, where the lymphatic glands are nearest the surface. The glands which are originally the seat of the disease may be felt in numbers under the skin as more or less doughy, movable bodies. They grow slowly, and finally approach the surface, undergo degeneration, and suppurate. The overlying skin becomes thinned and of a livid red or violaceous color. Eventually the abscess bursts, and a thin, curdy pus escapes. Sinuses and fistulous tracks form and strumous ulcers are developed. The ulcers are usually superficial, ovalish or linear in outline, with thin, red, undermined edges, and an irregular base covered with pale, unhealthy granulations. The cicatrices resulting from the healing are bound down to the underlying tissues, have a puckered appearance, and are sometimes hypertrophic. They are rarely painful. Their formation is slow but progressive, ulceration and repair going on at the same time.

What is the etiology?

The affection is due to the presence of the tubercle bacillus, but it is necessary to have a suitable soil for its development, which is found in the "strumous diathesis." Lack of nourishing and suitable food, bad hygienic surroundings, and heredity are influential in producing the diathesis, and as such are predisposing *causes*, as are also debilitating diseases.

What are the diagnostic features?

The history of the disease, the strumous condition of the subject, and the superficial ulcerations with their undermined borders, are characteristic. These features, with the absence of the peculiar apple-jelly-like nodules, will distinguish it from lupus vulgaris. In syphilitic ulceration there is more or less infiltration, and the ulcer is deep, with clean-cut edges and profuse secretion.

What is the prognosis?

Under favorable conditions the *prognosis* is good. The disease is always amenable to treatment.

What is the treatment?

The *treatment* should be directed to the improvement of the general condition. To this end good food, outdoor exercise, and proper hygiene are essential, together with the exhibition of tonics, such as cod-liver oil, iron, quinine, arsenic, and strychnine. Locally, wiping the ulcers with pure carbolic acid, nitric acid, or a strong solution of zinc sulphate, and afterward dressing them with soothing or slightly stimulating antiseptic dressings, will prove of service.

SEBACEOUS CYST.

What is a sebaceous cyst?

A sebaceous cyst, steatoma, or wen, is an elevated, rounded, soft or firm, and elastic tumor, varying in size from a millet-seed to an egg, and due to the distension of a sebaceous gland by its retained secretion. These tumors usually have the normal color of the integument covering them, but when greatly distended they may become yellowish-white or milky-white from pressure. They may be single or multiple, and may occur upon all parts of the body, but the most common seat is the scalp and back of the neck. They are painless, slow in their development, and often remain unchanged for years, causing no annoyance except from their unsightliness. In rare instances they inflame and ulcerate.

Is the diagnosis difficult?

Usually not; occasionally the orifice of the sebaceous gland is visible or sufficiently free to allow the contents to be squeezed out, and then the *diagnosis* is apparent. Sometimes they may be confounded with fatty tumors or gummata.

Fatty tumors are rare on the scalp, are rarely multiple, often lobulated, and not freely movable. Gummata are usually attached to the deeper structures, are painful, and generally ulcerate.

What is the treatment?

The *treatment* consists in excision, with complete removal of the sac. If any part of the sac remains, the cyst is apt to recur. Injection of the cyst with carbolic acid or iodine, which excites an inflammation and destroys the sac, has been recommended, but it is an unreliable procedure.

SEBORRHŒA.

Synonyms.—Steatorrhœa; Acne sebacea; Ichthyosis sebacea; Dandruff.

What is seborrhœa?

Seborrhœa is a functional disorder of the sebaceous glands which causes either an excessive or an altered secretion. This secretion is seen upon the skin in the form of oily, scaly, or crusted material. The disease is usually described under three forms—seborrhœa oleosa, seborrhœa sicca, and the mixed type—their names being derived from the character of the secretion present.

What are the clinical features of seborrhœa oleosa?

In seborrhœa oleosa the secretion is poured out as an oily matter upon the skin. It is most frequently seen upon the face, especially over the nose and forehead, giving to the surface a shining, greased appearance, and is sometimes so profuse that free drops of oil may be seen exuding from the glands. Floating particles of dust readily adhere to it, producing a dirty or darkened hue. The skin is sometimes cold to the touch, and assumes a bluish redness in strumous subjects.

What are the clinical features of seborrhœa sicca?

This form of seborrhœa, occurring upon the scalp, is commonly called dandruff. The scales are dry and situated upon a non-inflammatory surface. Seborrhœa sicca seldom occurs alone upon the face, but is seen there in conjunction with seborrhœa oleosa.

What are the clinical features of the mixed type?

This is the most common type of the disease, and is seen chiefly upon the scalp, upon which the sebaceous matter accumulates in irregular patches of firmly adherent, thick, greasy crusts. The amount of crusting varies, being sometimes so profuse as to mat the hair together. Unless this material is kept constantly removed, it becomes very disagreeable, and may occasion dermatitis. Ordinarily, the underlying surface is anæmic and leaden-looking, but at times, when the process is severe, the skin may be hyperæmic or even inflamed. The hairs lose their lustre, become dry, and fall out. This form is also seen upon the sides of the nose and behind the ears. Itching is present in a variable degree.

What are the usual sites for seborrhœa?

It may occur on all parts of the body where there are sebaceous

glands, but is most frequent upon the scalp, face, and over the sternal and interscapular regions.

What do you understand by seborrhœal eczema?

A form of seborrhœa described under the name of *eczema seborrhoicum* by Unna, and as *seborrhœa corporis* by Duhring. It occurs upon all parts of the body, but has a special predilection for the sternal and interscapular regions. The patches are circular, or, where several have coalesced, irregular in outline, and they vary in size from a split pea to a silver half-dollar. The patch is slightly elevated, red, and covered with more or less greasy or withered and dry scales. The resemblance to psoriasis in some cases is very marked, but the scaling is never so profuse in the former.

What is the etiology of seborrhœa?

In some cases no *cause* can be assigned. It is usually dependent upon some general disturbance of the system due to digestive derangements, as anæmia, chlorosis, menstrual disorders, etc. Upon the scalp it is often due to lack of proper care.

What diseases does seborrhœa resemble? and how may it be distinguished from them?

Eczema and psoriasis when the scalp is affected; lupus erythematosus when the face is affected; psoriasis, ringworm, and pityriasis rosea when the trunk is affected.

Upon the scalp *eczema* rarely involves the whole surface, the skin is red or infiltrated, and the scales are not greasy. In *seborrhœa* the entire surface of the scalp is usually involved, the skin is pale and not thickened, and the scales are greasy and may be rolled up between the fingers. In *psoriasis* the patches are discrete, the scales are piled up in mortar-like masses and are dry, not greasy and, furthermore, patches can almost always be found on other parts of the body.

Lupus erythematosus has a close resemblance to seborrhœa of the face, but the margin is sharply defined, the patch is slightly elevated, of a reddish or purplish hue, and often with points of scarring.

Upon the body (*seborrhœal eczema*) it differs from *psoriasis* in the smaller number of lesions, in the location, and in the amount and character of the scales; from *ringworm*, in the characteristic development of the latter, its inflammatory symptoms, the possible history of contagion, and the presence of the spores under the

microscope; from *pityriasis rosea*, in the history and course of the latter, which ends in spontaneous recovery.

What is the prognosis?

In seborrhœa affecting the scalp the disease is often rebellious to treatment, but an ultimate cure may always be expected. On non-hairy parts the disease yields readily to treatment.

What is the treatment?

In all cases the correction of the constitutional disturbance which is present is of the greatest importance. To this end diet, outdoor exercise, and general hygienic measures are to be insisted upon, as is also the exhibition of such tonics as are indicated.

Local Treatment.—In seborrhœa of the scalp it is necessary, first of all, to get the skin perfectly clean and free from scales. For this purpose shampooing with hot water and tincture of green soap will prove most efficacious, though in mild cases ordinary toilet soap will answer. The frequency of the shampoo will depend upon the rapidity with which the scales form. Ordinarily, once in five or seven days will be sufficient. When the scalp is perfectly clean any of the following medicaments may be applied, and the milder ones may be used in the other forms of the disease as well. Sulphur may be employed in ointment, 5 to 10 per cent., alone, or better with the addition of from 2 to 4 per cent. salicylic acid. Salicylic acid may be used alone, in ointment, 3 to 10 per cent., or as above. Ammoniated mercury is used alone, in ointment, 1 to 3 per cent. in strength; resorcin, either in ointment or in lotion, with ol. ricini and alcohol, in 2 to 10 per cent. strength. The ointments should be well rubbed in.

The following prescriptions are recommended:

℞. Acidi salicyl., gr. xv;
Sulphur. præcip., gr. l;
Vaseline, ℥j.—M.
Sig. Rub thoroughly into the affected parts twice daily.

℞. Hydrarg. ammoniat., ℈j;
Hydrarg. chlorid. mitis, ℈ij;
Vaseline, ℥j.—M.
Sig. Apply thoroughly twice daily.

Resorcin in ointment 5 to 10 per cent.

In seborrhœa oleosa the following lotion is excellent:

℞. Zinci sulphat.,
Potass. sulphuret., āā. ℥j;
Aquæ rosæ, ℥iv.—M.
Sig. Mop on the parts twice daily.

SUDAMEN.

What is sudamen?

Sudamen, or miliaria crystallina, is a functional affection of the sweat-glands distinguished by the appearance upon the skin of minute, isolated, clear vesicles.

What are the clinical features?

The eruption consists of numerous aggregated, though discrete, clear, pinhead-sized vesicles resembling minute drops of water. They are situated upon the normal integument, and are without inflammation. They develop quickly in successive crops, and disappear in a few days by absorption, the covering of the vesicles exfoliating in fine branny scales.

What is the etiology?

It is usually seen in any systemic disturbance in which there is an excessive rise of temperature. It sometimes occurs in persons in good health in whom there is increased formation of sweat.

What are the diagnostic features?

The clear vesicles and the absence of all inflammatory symptoms distinguish it from miliaria.

What is the treatment?

Removal of the exciting cause is the main indication; locally, the application of cooling lotions or dusting powders of starch, lycopodium, or talc.

SYCOSIS.

Synonyms.—Sycosis non-parasitica; Mentagra; Folliculitis barbæ.

What is sycosis?

Sycosis is a chronic, non-contagious, non-parasitic, inflammatory disease, limited to the hair-follicles of the beard, and characterized by papules and pustules, each of which is perforated by a hair.

What are the symptoms of sycosis?

Sycosis begins as a follicular or perifollicular inflammation with the formation of a papule. After a variable length of time suppuration takes place, and the papule becomes a pustule, which is pierced by a hair and does not rupture, but dries into a yellowish crust. Through extension of the inflammation other follicles become affected and undergo a similar process. As ordinarily seen, the eruption is made up of these various lesions in different stages of development, affecting larger or smaller areas of the skin of the beard. The skin will be reddened, swollen, and infiltrated, and affected by more or less itching, burning, and pain. When suppuration occurs the hairs become loosened and may be easily plucked out. In severe cases permanent alopecia or scarring may result. Relapses do not always attack the same locality.

What is the course of the disease?

It is a chronic affection, being kept up by relapses for months or even years.

What is the etiology?

The *causes* are unknown. It is non-contagious, non-parasitic, and is limited to the bearded portion of the face. Its occurrence upon the upper lip is often the result of irritating discharges from the nose.

What is the pathology?

It begins as a perifollicular inflammation: transuded serum penetrates the follicle, and maceration and destruction of the root-sheath of the hair and the formation of pus result.

What diseases does sycosis resemble? and how is it distinguished from them?

Eczema and ringworm of the beard.

Eczema rarely affects the bearded portion of the face alone, the neighboring non-hairy parts being also affected. The lesions are not discrete, and are not invariably pierced by hairs, and the crusting is much more abundant.

In *ringworm of the beard* the affection begins as a circumscribed scaly patch; the eruption is distinctly nodular; the hairs are lustreless, dry, have a gnawed-off appearance, and may be easily plucked out. Under the microscope the spores may be found.

What is the prognosis?

The *prognosis* is always uncertain. The disease is very persistent and relapses are common.

What is the treatment?

Local *treatment* should be entirely depended upon in this affection. When the disease is acute, soothing applications may be made to allay the inflammation. Hot fomentations, followed by a soothing ointment, will be found of great service. Where pustules exist, epilation should invariably be employed. In the more chronic forms the hairs should be extracted from the papules as well as from the pustules, and the beard should be shaved every second day. After shaving or epilation the parts should be fomented to allay the irritation, and then some astringent or slightly stimulating ointment should be applied, as diachylon ointment with 1 to 3 parts of lard; salicylic acid, 2 per cent. with sulphur 5 per cent.; resorcin, 3 to 10 per cent.; ichthyol, 10 to 25 per cent.; cinnabar, 5 per cent.

SYPHILIS CUTANEA.

Synonyms.—Syphiloderma; Dermatosyphilis; Syphilis of the skin.

In what forms does syphilis appear upon the skin?

It may appear as macules, papules, vesicles, bullæ, pustules, tubercles, or gummata, or the eruption may be "mixed" and present two or more of the above forms at once.

What can you say concerning the location and configuration of the syphilitic eruptions?

The *early secondary* eruptions have no distinctive configuration, and are more or less general and symmetrical. The different varieties seem to have, however, a preference for certain tolerably definite sites, as will be seen in their description. The later eruptions (*the late secondary*), while they retain their symmetrical distribution, have a tendency to group and form circles or segments of circles, and the latest eruptions (*the tertiary*), which consist of tubercles, gummata, or ulcers, are usually more or less localized, occur in groups, and affect a circular arrangement.

What is the color of the syphiloderms?

They are not always of the same color, varying with the age of the lesion and its location. As a general thing, the lesions are

said to be coppery or lean-ham colored. Alone, the color is not of much diagnostic importance, but together with other features of syphilis it has considerable weight. Pigmentation left after the disappearance of a syphilitic eruption is not peculiar to syphilis, but in connection with other signs it may have some significance. Recent syphilitic scars are usually pigmented both in the centre and at the periphery. Here it is not the color, but the scar *with* the color, which is diagnostic.

What are the subjective symptoms of the syphilodermata?

As a rule, there are none, this being one of the marked diagnostic features of the disease. Occasionally, however, slight itching may be present.

Describe the macular syphiloderm.

The macular syphiloderm (synonyms: Erythematous syphilide; Syphiloderma erythematosum; Syphilitic roseola: Exanthematous syphilide; Syphilis cutanea maculosa) is a more or less general and symmetrical eruption which appears in from forty days to six weeks after the development of the primary lesion, and may or may not be ushered in with marked systemic disturbances. It consists of macules which vary in size from a pea to a penny. They are round or oval in outline, discrete in shape, and, rarely, somewhat elevated. At first they are pinkish in hue, but later become coppery or lean-ham colored, and they do not fade on pressure. The favorite regions of attack are the belly, the sides of the chest, the flanks, and the flexor surfaces of the limbs. The face, backs of the hands, and feet are generally free. The duration of the eruption is uncertain, sometimes disappearing rapidly or lasting for several weeks or longer. It yields readily to treatment. Relapses of the macular syphiloderm sometimes occur during the first year. The eruption is then generally localized and shows a tendency to assume a circinate form.

With what affection may the macular syphilide be confounded? and how is it differentiated?

With measles, the medicinal rashes, and chromophytosis. It is distinguished from *measles* by its indolent character, its location, its usual absence from the face, and the non-accompaniment of catarrhal and febrile symptoms; from the *medicinal rashes* by the acuteness and essential characteristics of the latter, and its subsidence upon discontinuance of the exciting cause; from *chromophytosis*

by the color of the latter, its occurrence in large diffused patches, and its limited location.

Describe the papular syphiloderm.

The papular syphiloderm occurs in two forms—the small lesions (miliary papular syphiloderm) and the large lesions (lenticular papular syphiloderm).

The lesions of the *miliary papular syphiloderm* appear as millet-seed to hempseed-sized, spherical or acuminate, discrete, firm, reddish elevations. Occasionally close examination will disclose minute vesicles or vesico-pustules upon the apex of each. The eruption may be scattered or grouped, sometimes arranged in patches, and is most freely developed on the trunk, buttocks, and legs. The color is at first bright-red or salmon, becoming later dark-red or brownish. There are usually some large papules present. When the papules undergo involution they leave behind pigmentation and slight scars. The eruption usually comes on in two or three months from the development of the chancre, is very persistent, and is prone to relapse. The clinical features of the miliary syphiloderm, when taken together, form so characteristic a picture that a mistake in diagnosis is hardly probable. It somewhat resembles papular eczema, lichen planus, keratosis pilaris, and psoriasis punctata.

The *lenticular syphiloderm* (large papular syphiloderm) is one of the most common and characteristic types of the eruption. The lesions appear as pea- to bean-sized, flat, circular, or oval, well-defined, slightly elevated papules, in shape often resembling a button. They are dark-red or lean-ham colored, and may be covered with a slight epidermal scale. The papules come out quite freely, and in the beginning may be widely distributed, appearing on the trunk, face, forehead, scrotum, labia, and about the anus. They appear as an early or late symptom of the disease. After persisting for a variable period, involution may take place, the papules being absorbed and leaving a pigmentation which finally disappears. Under the influence of various causes the papules may be converted into moist papules or squamous papules.

Describe the moist papule of syphilis.

The moist papule (mucous patch; flat condyloma) varies in size from a pea to a dime, and is not uncommon in regions whose surfaces are more or less in apposition, heat and moisture favoring their development. They are thus found about the nates, under the mammæ, upon the scrotum and adjacent thighs, on the umbili-

cus, and in the axillæ. The heat and moisture in these regions gradually macerates the surfaces of the papules, which are soon covered with a puriform mucus that is highly contagious and often very offensive. The *large condylomata* are formed by a coalescence of several moist papules. These condylomata vary in size, some even becoming an inch or two in diameter. Occasionally papillary hypertrophy takes place, forming warty, vegetating lesions, which pour out an offensive fluid from between the papillæ, and this dries into yellowish-brown crusts (vegetating syphiloderm).

Describe the squamo-papular syphilide (squamous papule).

The papulo-squamous syphiloderm (squamous syphilide; psoriasis syphilitica; syphilis cutanea squamosa) receives its designation when the scaling becomes a marked feature. The papules are somewhat flattened, and the scales are dirty-white or grayish, desiccated, and usually firmly attached. These scales are situated upon the apex or about the base of the papule. Occurring in the secondary stage of the disease, the lesions are widely disseminated, but in the tertiary form they occur in more or less localized areas. In this stage the papules may be discrete, or may form groups which by fusion of the individual lesions become large patches. At times, from spontaneous involution beginning in the centre of the patches, circinate and gyrate figures may occur. The squamous patches occur most frequently upon the palms and soles (palmar and plantar syphiloderm).

How would you distinguish the squamous syphilide from psoriasis and eczema?

In *psoriasis* the scales are thicker, of a white or silvery-white color, and are easily removed, and the infiltration is much less; the eruption is more widely diffuse, the extensor surfaces being involved, and the palms and soles almost invariably free. The symptoms of syphilis are absent.

Squamous eczema of the palms and soles resembles very closely the palmar and plantar syphiloderm, and a diagnosis is often extremely difficult to make. Eczema usually occurs on both palms, while syphilis most commonly occurs on one alone. The patch of eczema may merge gradually into the sound skin, while that of syphilis is more sharply defined. Eczema shows little, if any, tendency to heal in the centre, while in syphilis the centre will often be clear and the disease extend from the periphery.

Name the different kinds of pustular syphiloderm.

The small, acuminated-pustular syphiloderm; the large, acuminated-pustular syphiloderm; the small, flat-pustular syphiloderm; the large, flat-pustular syphiloderm.

Describe the small acuminated-pustular syphiloderm.

The small acuminated-pustular syphiloderm (miliary pustular syphiloderm) is probably the transformation of a papule in a person of a progenic tendency or in one subjected to uncleanliness and external irritation. The lesions are seen as pinhead-sized acuminated pustules upon a papular base, usually around a hair-follicle. Intermingled with the pustules will be seen numerous unchanged papules. The pustules contain but a single drop of purulent matter, which, drying, forms a brownish crust. The lesions may be discrete or confluent, localized or widely distributed, and sometimes may affect a circular arrangement. They occur usually in the latter part of the secondary stage, and are seen chiefly upon the trunk and extremities.

Describe the large acuminated-pustular syphiloderm.

The lesions of the large acuminated-pustular syphiloderm (acne-form syphiloderm; variola-form syphiloderm), which are usually seated about a hair-follicle, are discrete, acuminated, or sometimes flattened, and about the size of a split pea, resembling acne. They usually develop from a macular or small pustular lesion, rarely from a papular or indurated base. The pus dries into rather thick yellowish-brown crusts, which are somtimes umbilicated, and beneath which are slight ulcerations. The eruption develops more or less rapidly in the early part of the secondary stage of the disease, is more or less widely distributed, and sometimes the lesions are grouped. Relapses are not infrequent.

What diseases does the large acuminated-pustular syphiloderm resemble? and how would you distinguish it?

Acne and variola.

In *acne* the face and shoulders only are affected; the disease is more persistent, sometimes lasting for years, and there are none of the general symptoms of syphilis.

In *variola* the eruption is accompanied by marked febrile and other systemic disturbances, and the lesions run a definite course.

Describe the small, flat-pustular syphiloderm.

The small, flat-pustular syphiloderm (impetigo-form syphiloderm) is not an uncommon form of eruption, and is usually seen about the face, scalp, genitals, and upon the flexor aspect of the limbs. About the mucous-membrane outlets of the body it usually shows a tendency to circinate and characteristic grouping. The lesions begin as macules or papules, which develop into small flat pustules seated upon an ulcerated base, and which dry into yellowish or brownish crusts. At times the pustules are so closely set that they coalesce, forming large encrusted patches. The eruption usually appears late in the secondary stage of the disease. In the scalp it may resemble pustular eczema, but the pruritus and absence of ulceration in the latter, and the presence of the general symptoms of syphilis in the former, will distinguish it.

Describe the large, flat-pustular syphiloderm.

In the large, flat-pustular syphiloderm (ecthyma-form syphiloderm) the lesions develop from macules and papules, as in the former variety, but they are more fully developed, are larger, and the process is more intense. They appear as finger-nail-sized or larger, unsymmetrical, isolated, flat pustules seated upon a more or less inflamed base. They dry into crusts which invariably cover underlying ulcers. The eruption may be limited to the scalp, face, neck, and flexor aspect of the extremities, or may be more widely diffused. Two varieties are described—the superficial and the deep—which vary only in the size and shape of the crust, the extent of the ulcer, and the intensity of the process. In the *superficial variety* the crusts are dark-brown or blackish, thin, and flat; the ulcer is superficial and surrounded by a slight redness. In the *deep variety* the crusts are black, conical, disposed in layers, and are of a black or greenish-black color (*rupia*). The ulceration is deep-seated, with clean-cut edges, and is surrounded by a deep-red areola, and has a profuse bloody, puriform discharge. This variety occurs late and is associated with cachexia. The lesions of the flat-pustular syphiloderm differ from *erythema* in being more abundant, in their non-inflammatory appearance, in the copper-colored areola, and in the greater depth of the ulceration.

Describe the vesicular syphiloderm.

The vesicular syphiloderm (vesicular syphilide; syphilis cutanea vesiculosa; syphilitic eczema) is a very rare condition, and is

extremely transitory; it is doubtless an accidental feature in the evolution of other forms.

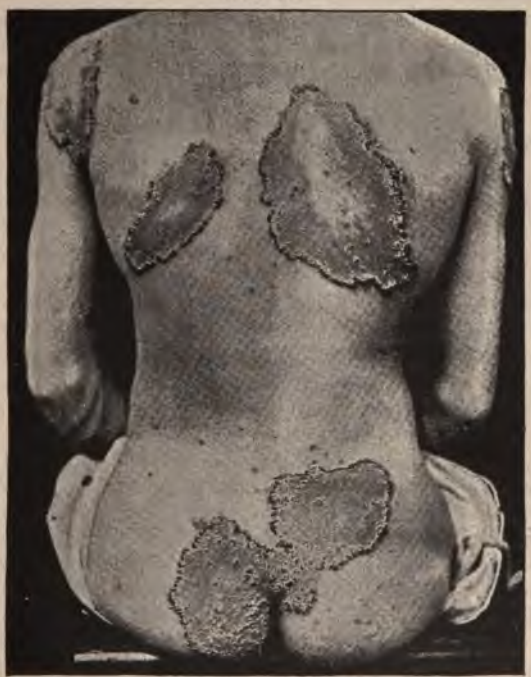
Describe the bullous eruption of syphilis.

The bullous syphiloderm (bullous syphilide; syphilis cutanea bullosa; syphilitic pemphigus) of acquired syphilis is a rare and late form, and is usually of a malignant type and found in cachectic subjects. The lesions vary from a pea to the finger-nail or larger in size, and at first are filled with a clear serum which later becomes lactescent and mixed with pus. They dry rapidly into thick, greenish-black, and adherent crusts, which sometimes take on the rupial arrangement, in which case the underlying ulceration is very deep. The bullous syphiloderm frequently appears in hereditary syphilis in infants, but it is usually not so severe a type as in the acquired form.

Describe the tubercular syphiloderm.

The lesions of the tubercular syphiloderm (tubercular syphilide; syphilis cutanea tuberculosa) consist of red or dark-red, firm, rounded tubercles or nodules, deeply seated and involving the entire structure of the skin, and which are more or less localized in their distribution, tending to occur in groups and affecting a circinate arrangement. They occur in the tertiary stage of the disease, sometimes not appearing until years after infection, and constitute one of the most common types of syphilitic eurption. They are especially prone to attack the face, back, and heighborhood of the joints. The lesions run a chronic course, and may persist for an indefinite period, with little or no change. Usually, however, involution takes place, either by resolution (non-ulcerating tubercular syphiloderm) or by ulceration (ulcerating tubercular syphiloderm). When they disappear by resolution, the skin is left pigmented, depressed, and slightly scaly. When the lesions ulcerate, the ulceration rarely affects all the tubercles situated in a given patch, but involves only a few, and the patch will present here and there, usually in the periphery, small, rounded ulcers covered with crusts. As the ulceration progresses new lesions may develop in the border of the patch. Sometimes by coalescence of the small ulcers a large ulcerated patch is formed which may assume an oval or kidney shape. This syphiloderm, especially about the scalp, may undergo a papillomatous transformation, the warty vegetations being covered with an offensive secretion (syphilis cutanea papillomatosa).

FIG. 27.



Tubercular Syphilide (after Taylor).

What are the diagnostic features of the tubercular syphiloderm?

The circinate configuration, the punched-out appearance of the ulcers, the pigmentation, and the presence of scars. It is to be distinguished from leprosy, epithelioma, and lupus vulgaris.

Describe the gummatous syphiloderm.

In the gummatous syphiloderm (syphilis cutanea gummatosa; gumma; syphiloma) the lesions first appear as pea- to bean-sized, circumscribed nodules, seated beneath the skin, and, at first, freely movable. They develop slowly as a rule, and may attain the size of a marble or even an egg. As they increase in size they become attached to the underlying tissues, firmly fixed, and the overlying

skin becomes involved. The surface inflames, becomes reddened and thinned, and finally breaks down, a deep clean-cut ulcer being formed which secretes a bloody, fœtid pus. The gumma should be differentiated from furuncle, abscess, lipoma, fibroma, and sebaceous cyst.

Describe the character and form of the eruption in congenital or hereditary syphilis.

The cutaneous eruption of congenital syphilis may consist of macules, papules, pustules, or bullæ, or of a mixture of these lesions, thus showing the identity of the disease with the acquired forms of maturer years. They often present peculiarities, however, which are characteristic of this form.

The *macular eruption* is usually seen early as variously sized, discrete, roundish, or irregular macules of a bright-red or coppery color, which first appear upon the belly or lower part of the chest, and gradually extend to other portions of the body. They sometimes coalesce to form large irregular patches or diffused sheets of eruption covering an entire region, as the neck, buttocks, thighs, or genitalia, the surfaces being red or copper-colored and glazed, or moist and secreting. At times the soles and palms are red, wrinkled, and desquamating. Deep excavations, and even fissures, sometimes form in these extensive patches as a result of traumatism.

The *papular eruption* in this form of syphilis usually appears early, and may be seen alone or in connection with the macular form. The lesions usually occur in the form of discrete flat papules, are of a coppery-color, slightly elevated, and smooth, but in certain locations, as the palms and soles, they may be more or less scaly. Occurring about the nates (near the anus) or the angles of the mouth, they are rapidly converted into moist papules or *mucous patches*, which are identical with those of the acquired form.

The *bullous eruption* (syphilitic pemphigus) is the most malignant form of congenital syphilis, and the one most frequently seen. It usually appears early, and has a predilection for the palms and soles, extending thence up the arms and legs. It is rarely seen upon the face. The bullæ vary from a pea to a walnut in size, are filled with a cloudy, purulent, or even bloody fluid, and are surrounded by a thickened rim of copper-colored integument. They are symmetrically disposed, but have no uniformity of shape.

In addition to the cutaneous symptoms of congenital syphilis there are other well-marked symptoms which always exist in greater or less degree in connection with the eruption, and are sometimes

seen when no cutaneous lesions are to be found. These consist of mucous patches or ulcers in the mouth and throat, persistent coryza, producing the characteristic "snuffles," the peculiar hoarse sound of the voice in crying, and the cachectic condition which is shown by the waxy hue of the skin and emaciation, giving to the face a characteristic senile expression.

What is the prognosis of syphilis?

In the acquired forms the *prognosis* is favorable. Under proper treatment the cutaneous lesions pass away, and when the treatment is carefully followed up the disease, in the majority of cases, is cured. In the late forms, where ulceration has taken place, considerable local deformity may result. Congenital syphilis is the gravest form of the affection, and the prognosis is generally unfavorable.

What is the treatment of syphilis cutanea?

The *treatment* of cutaneous syphilis will vary according to the stage of the disease, the form of the eruption, and its extent. In all cases the constitutional treatment is of the greatest importance, and is, as a rule, the only treatment needed. In occasional instances, however, where the lesions are especially large, annoying, or persistent, or where they are localized, as in the tertiary stage of the disease, local applications will aid materially in hastening their disappearance and in preventing severe secondary changes.

Mercury and iodide of potassium are specific remedies in syphilis, but they must be employed in a judicious manner and with careful attention to the general condition of the patient. A plain nutritious diet, with outdoor exercise and hygienic surroundings, and, when indicated, the use of tonics, will greatly enhance their effect.

What are the different methods of administering mercury and the various preparations employed?

By the mouth, by inunction, by hypodermic injection, and by fumigation. Administration by the mouth is the common method, and is usually the most satisfactory, unless contraindicated, in which case any of the others may be employed. Certain preparations of mercury seem to have a special effect in different stages and conditions of the disease, and in selecting them this fact must be borne in mind.

In the secondary stages of cutaneous syphilis the following preparations are commonly used:

Blue mass in pill form in 1- to 3-grain doses. An excellent combination is the so-called "pill duo:"

℞. Hydrarg. mass., ʒj;
Ferri sulph. exsic., ʒss.
M. et div. in pil. No. xxx.
Sig. One pill three times a day.

Hydrarg. cum creta, or gray powder, in 1- to 3-grain doses; hydrarg. protiodide in ⅓- to ¼-grain doses. An excellent formula, used by Dr. R. W. Taylor, is as follows:

℞. Hydrarg. protiodid., gr. vj;
Ferri et quininæ citratis, ʒiss;
Ext. hyoscyami, gr. vj.
M. et div. in pil. No. xxx.
Sig. One pill three times a day.

In severe cases, or where prompt action of the drug is desired, inunction with mercurial ointment is recommended.

In prescribing mercury the dose must be regulated so that it falls just short of physiological action, and should be given for three months after all symptoms of the disease have disappeared. After this it should be continued in small doses for one or two years, with occasional intermissions.

In the late or tertiary forms of the disease the biniodide or the bichloride of mercury is the favorite preparation, and it may be used alone or in combination with the iodide of potassium, constituting the so-called "mixed treatment." In debilitated or anæmic subjects the addition to the prescription of iron or a bitter tonic will prove of great service. Iodide of potassium should never be used in the secondary stage of the disease unless specially indicated. It may be employed here with good effect to relieve neuralgic or arthritic pains, and be continued until they have disappeared, but then should be stopped.

What are the local applications used in syphilis cutanea?

For local applications in all the stages of the disease the favorite remedies are—mercurial ointment, ammoniated mercury ointment or the oleate in ointment, dusting powder of calomel, and mercurial plaster. Ulcers and mucous patches may be touched with nitrate of silver or acid nitrate of mercury, and if on the

cutaneous surface they may be dressed with iodoform and iodol. In hereditary syphilis the same treatment may be used as in the acquired forms, but obviously the doses must be smaller and the applications much weaker. In this form baths containing some form of mercury will be found very advisable.

TRICHOPHYTOSIS.

What is trichophytosis?

Trichophytosis, or ringworm, is a contagious parasitic disease of the skin, due to the presence of the vegetable parasite, the trychophyton.

What are the several varieties commonly met with?

Trichophytosis corporis, ringworm affecting the body; *trichophytosis capitis*, ringworm affecting the scalp; *trichophytosis barbæ*, ringworm affecting the bearded portion of the face.

Describe trichophytosis corporis.

The lesions of trichophytosis corporis (tinea trichophytina corporis; tinea circinata; ringworm of the body) usually begin as small pea-sized, reddish spots, which are sharply defined against the healthy skin, somewhat raised above its surface, and are covered with slight furfuraceous scales. These spots gradually extend at the borders, while involution takes place in the centre of each, thus giving to them a characteristic ringlike aspect. As commonly seen there are one or several patches, varying in size from a penny to a quarter of a dollar, the central portion clear, but somewhat reddish in color, while the edges are slightly elevated, sharply defined, scaly, and sometimes vesicular. Occasionally a large irregular patch may be seen, due to the coalescence of several smaller ones. The lesions develop more or less slowly, and may persist for an indefinite period. In some instances the disease is self-limited. When those portions of the skin become affected of which the surfaces are in apposition, the heat and moisture favor the development of the fungus, and, as a consequence, the symptoms are much more violent and obstinate. This form of the disease is frequently observed in cavalrymen or others who spend much time in the saddle, and is seen on those parts which come in contact with the saddle—viz. the perineum and inner surfaces of the thighs (trichophytosis cruris; eczema marginatum). From these parts the disease may extend to the scrotum and up over the abdomen, and the process

may take on an eczematous character, which is often exceedingly rebellious to treatment. It may be distinguished from the latter, however, by the symmetrical distribution and clearly defined margin.

Describe trichophytosis capitis.

Trichophytosis capitis (tinea tonsurans; ringworm of the scalp) attacks children almost exclusively, being scarcely ever seen in adults. The lesions begin as pea-sized, scaly patches, which if numerous are more or less widely disseminated over the surface of the scalp. They extend peripherally, and eventually attain the size of a penny or larger. When fully developed the patches are circular in outline, slightly elevated above the surface, covered with scales, and sometimes with small vesicles or vesico-pustules, and crusts. The hair-follicles are somewhat enlarged and prominent, and the hairs covering the patch are dry, lustreless, and broken, giving to them a characteristic gnawed-off appearance. The color of the patches varies, being slate-colored or bluish in persons of dark complexion, and pinkish in those of lighter hue. At times, from the irritation of the trichophyton in a vulnerable subject or from external irritation, an inflammation may ensue which extends to the deeper structures, and a condition known as *tinea kerion* may develop.

Kerion appears as a rounded, inflammatory, circumscribed elevation of the skin, which is soft to the touch and resembles a subcutaneous abscess. It is more or less devoid of hair, and is studded over with gaping follicles from which issues a sticky, honey-like secretion.

What are the diagnostic features of trichophytosis capitis?

The circular scaly patches covered with gnawed-off looking hairs, and the presence of the fungus revealed by the microscope. It is to be distinguished from eczema, psoriasis, seborrhœa, and alopecia areata.

Describe trichophytosis barbæ.

Trichophytosis barbæ (ringworm of the beard; tinea sycosis; parasitic sycosis; barber's itch) is limited to the bearded portion of the face. The lesions begin as one or more small reddish spots, which gradually extend and become scaly, or occasionally have upon their surfaces small vesicles or vesico-papules. Sometimes the process extends no farther, the patches remaining unchanged, and

finally disappearing spontaneously or under mild treatment. As a rule, however, the hairs and follicles become involved, a greater or less degree of inflammation ensues, and a lumpy condition of the affected area results. The skin has an inflamed and shiny appearance, the hairs loosen and fall out or are easily extracted, and

FIG. 28.

Trychophyton Tonsurans in Hair-shaft and Follicle (after Kaposi).

here and there upon the surface are isolated pustules. Often pustulation is a marked feature, and considerable crusting takes place, beneath which the skin presents a reddened, uneven surface, with the follicular openings distended, from which a mucoid secretion exudes. The extent of the disease varies. It may be confined to two or three circumscribed nodules or may extend over the entire region. The upper lip is seldom affected.

Trichophytosis barbæ is to be distinguished from eczema and sycosis. The inflamed and swollen skin studded with nodules, the loosened and easily extracted hairs, the follicular openings exuding a honey-like secretion, which are disclosed on the removal of the crusts, are characteristic features of this disease. The presence of the fungus under the microscope will make the diagnosis positive.

What is the prognosis of trichophytosis?

Occurring upon the body, the affection yields readily to treatment. Upon the bearded portion of the face the disease is more obstinate than upon the body, but can usually be cured in from two weeks to as many months. Ringworm of the scalp is exceedingly rebellious to treatment, and under the most favorable conditions is seldom curable under three months. In the chronic cases it may take one or two years completely to eradicate the disease

What is the treatment of trichophytosis?

In the several forms of trichophytosis the primary object of *treatment* is destruction of the parasites. To this end any one of the various parasiticides may be employed. Its selection is a matter of some importance, however, as the different regions affected will be found to vary in their susceptibility to treatment.

In *trichophytosis corporis* the patches should be first thoroughly washed with a strong soap and hot water, after which any of the milder parasiticides may be employed. Among the favorite remedies are—sodium hyposulphite, in saturated solution; corrosive sublimate, 2 to 4 grains to the ounce; salicylic acid, 5 to 10 per cent. in alcohol or castor oil; boric acid, in saturated solution; or ointments containing either sulphur, ammoniated mercury, salicylic acid, resorcin, or gallacetaphenol. An excellent combination is the following:

℞. Acidi salicyl., gr. xv;
Sulphur. præcip., ℥j;
Vaseline, ℥j.—M.
Sig. Apply thoroughly to the patches twice daily.

In *trichophytosis capitis* the scalp should be thoroughly shampooed every day with hot water and a strong soap to remove the accumulated scales. It is well to rub over the entire scalp an oil containing 5 to 10 per cent. of salicylic or boric acid, to prevent the spread of the infection. The hairs covering the patches and a small area surrounding them, when possible, should be epilated, after which any one of the stronger parasiticides should be applied and thoroughly rubbed into the skin. Among the best applications will be found the oleate of mercury in 10 to 20 per cent. ointment; sulphur ointment, 10 to 20 per cent.; salicylic acid and resorcin in 10 to 20 per cent. ointment; chrysarobin in ointment, 5 to 10 per

cent. (this must be used with great care). Naphthol in plaster, fuchsin in solution, and the essence of cinnamon in ether have been highly recommended of late, but I have not found them superior to the older remedies given above.

In *tinea kerion* the application should at first be mild and soothing; hot fomentations will aid in removing the inflammation; afterward the parasiticides may be used. The swelling should never be opened.

In *trichophytosis barbæ* epilation is of the greatest importance, and should be practised every day. The beard should be shaved every second day or kept closely cropped, and any of the various parasiticides may be employed in ointment or lotion. When there is much inflammation or swelling the parts should be fomented for ten or fifteen minutes twice daily, and the little pustules may be pricked open with a needle.

URTICARIA.

What is urticaria?

Urticaria, hives or nettlerash, is an exudative disease distinguished by ephemeral whitish or pinkish wheals, surrounded by reddish areolæ and accompanied by intense itching.

What are the clinical features of urticaria?

The distinctive lesions of this disease are wheals which appear suddenly and disappear rapidly, leaving behind no trace of their former existence. The wheals usually are pea- to finger-nail-sized, solid or semisolid elevations, resembling mosquito-bites. They are white or pinkish in color, and each is surrounded by a hyperæmic areola. In shape they are generally round or ovalish, but from irregularity in their development they may occur in lines, bands, and streaks, or with various irregular outlines. Sometimes, in persons of especially sensitive skins who are suffering from the disease, the slightest external irritation in healthy portions is followed by the development of urticarial patches; in this way the name may be written upon the surface (*urticaria factitia*).

The lesions of urticaria appear with or without general prodromal symptoms, and may be scanty and isolated or numerous and closely crowded together. Intense itching, with sometimes sensations of pricking, stinging, and burning, is always present, and is one of the most prominent symptoms of the disease.

What is the course of urticaria?

It is generally an acute and transitory affection, appearing suddenly, and after several hours or days disappearing as suddenly as it came. Rarely it may recur from the slightest cause, and may even become chronic.

There are several clinical varieties of urticaria, which derive their designations from the peculiarities of the eruption.

Name and describe the several varieties of urticaria.

Urticaria papulosa (*lichen urticatus*) is that variety in which small and papular lesions remain after subsidence of the evanescent wheals. Upon the lesions are often seen excoriations and blood-crusts as the result of scratching. It is most frequent in strumous children.

Urticaria tuberosa is that variety in which the wheals are unusually large ("*giant*" *wheals*), sometimes attaining the size of an egg.

Urticaria bullosa is a variety of urticaria in which the process is so severe that exudation takes place and bullæ are formed upon the wheals.

Urticaria hæmorrhagica is that variety in which the serous exudation contains some red blood-corpuscles, giving to the wheals a hemorrhagic appearance.

Urticaria pigmentosa is a variety occurring in young persons, in which the characteristic wheals are succeeded upon their disappearance by brownish or chocolate-tinted spots of pigmentation, which persist from one outbreak to another.

Massive urticaria, or acute circumscribed cutaneous œdema, is an acute local œdema of the skin and subcutaneous tissue which comes on suddenly without prodromal symptoms, rapidly increases to the size of a silver dollar or larger, and disappears within a few hours without leaving any trace. It usually occurs upon the face, is not sharply defined, and is generally attended with slight itching.

What is the etiology of urticaria?

Urticaria is due to various direct or indirect *causes* acting upon the vaso-motor system. The exciting causes may be local or general. Local irritation of any sort may evoke an eruption in one predisposed. Internally, gastric and intestinal irritation is the most prolific source of this affection. Certain kinds of food are said to have a special influence in producing the disease. Intense mental emotion may also precipitate an attack.

What is the diagnosis of urticaria?

The occurrence of wheals of an ephemeral character are characteristic, and not easily mistaken. It should be distinguished from various forms of erythema and from erysipelas.

What is the prognosis?

The *prognosis* is favorable. The acute form of urticaria rapidly disappears on removal of the cause. Chronic urticaria is usually obstinate and difficult to cure.

What is the treatment?

Removal of the exciting cause is the first indication, and as this is, in the acute form, usually an overloaded stomach or some indigestible article of food, an emetic or a full dose of castor oil or some other aperient will suffice to cure the attack.

In the chronic cases the same indications exist, but it is often difficult or impossible to determine the cause. The digestion should be corrected by the simplest kind of diet, and, this failing, empirical remedies may be resorted to. Among the most valuable will be found—ergot, atropine, quinine, iodide of potassium, salicylic acid, pilocarpine, antipyrine, and phenacetin. To relieve the subjective symptoms local applications will be found of service, and in many cases are invaluable.

Sponging the parts with vinegar and water; alcohol and water; bicarbonate-of-sodium solution; carbolic-acid solution, 2 to 10 per cent.; creolin solution, 2 to 4 per cent.; chloroform and ether, used best with an atomizer; and alkaline baths, followed by dusting powders of starch or zinc oxide,—all may be severally employed.

VERRUCA.

What is verruca?

Verruca, or wart, is a pinhead- to pea-sized or larger, hard or soft circumscribed hypertrophy of the papillary and epidermal layers of the skin. There are several varieties described, which receive their name chiefly from their different forms of development.

Name and describe the various forms.

Verruca vulgaris, the common wart, is most frequently seen upon the backs of the hands and fingers. It occurs singly or in numbers as a small, firm, rounded, circumscribed excrescence with

a smooth surface, or a roughened one from the excessive development of the papillæ. It is brownish, grayish, or blackish in color.

Describe verruca digitata.

This form of wart occurs usually upon the scalp. It is pedunculated instead of sessile, and is distinguished by peculiar finger-like projections.

Verruca plana (flat wart; verruca senilis; keratosis pigmentosa) is described under Keratosis Pigmentosa.

Verruca filiformis is seen most frequently upon the faces and necks of elderly persons. It occurs as a filiform, soft, and often pedunculated growth, which is covered with a smooth skin, and is believed by some writers to be the beginning of a fibroma.

Verruca acuminata (venereal wart; pointed wart; pointed condyloma) is most frequently seen about the genital and anal regions of both sexes. In the male it generally occurs around the corona and upon the frænum and prepuce of the penis, and in the female about the labia, clitoris, and vagina. The lesions may be few or very numerous, and consist of variously-sized and shaped, irregular excrescences. They are very vascular, pinkish or reddish in color. On the cutaneous surfaces they are dry and firm, but on the mucous-membrane surface soft and moist, and are usually covered with a mucoid secretion of an intensely disagreeable odor.

What is the etiology of verruca?

The *causes* of verruca are unknown. The common wart occurs most frequently between the tenth and twentieth years and upon uncovered parts. The acuminate variety is due to irritating discharges, especially those of gonorrhœa.

What is the treatment of verruca?

The best *treatment* is removal by electrolysis, or the warts may be curetted and their bases touched with chromic acid or other mild caustic.

The following is recommended:

℞. Acidi salicyl., ʒss;
Cannabis Indicæ, gr. v;
Collodion, ℥j.—M.

Sig. To be painted over the wart with a camel's-hair pencil.

The acuminate variety should be kept thoroughly clean with disinfecting solutions and dusted with astringent powders—equal

parts of lycopodium and boric acid; calomel or powdered alum will be found of service. Spraying with iodoform in ether is most efficacious. Warts with pedicles may be cut off or ligated.

VERRUCA CUTIS TUBERCULARIS, OR TUBERCULOSIS VERRUCOSA CUTIS.

What is tuberculosis verrucosa cutis?

This is a warty growth which occurs upon the hands of persons exposed to animal infection, as butchers, cooks, and hostlers. It appears as more or less extensive warty growths surrounded by rounded areolæ. The surface is more or less crusted, and pus may be seen oozing from between the papillæ. This condition is of similar causation to the preceding.

What is the treatment?

The best *treqtment* is curetting and touching the bases with a mild caustic to prevent recurrence.

VERRUCA NECROGENICA.

Describe verruca necrogenica.

Verruca necrogenica, post-mortem wart, or anatomical tubercle, is a circumscribed, warty growth which is often seen upon the hands of those who handle dead bodies. It usually appears on the backs of the hands or fingers as one or more variously-sized, slightly raised, circumscribed warty elevations, which soon become pustular. The disease is said to be due in some cases to inoculation of the skin with the tubercle bacillus or some of its ptomaïnes.

XANTHOMA.

Synonyms.—Vitiligoidea; Xanthelasma.

What is xanthoma?

Xanthoma is a cutaneous new growth which appears as one or more elevated or flat, yellowish patches, usually seen upon the eyelids. It occurs in two forms.

Name and describe the two forms.

Xanthoma planum occurs as single or multiple, variously-sized, circumscribed, flat plaques, which are said to resemble pieces of chamois skin imbedded in the tissue. They usually occur about the eyelids, appearing especially upon the upper lid. They are with-

out infiltration, and when pinched up between the fingers feel soft and flexible.

Xanthoma tuberculatum or **tuberosum** consists of variously-sized tubercular and nodular lesions which resemble those of the planum variety, except in their greater development. They are commonly met with at sites of pressure and on exposed parts, as on the buttocks, elbows, and knees. The lesions of xanthoma develop slowly, and after attaining a variable size may remain unchanged indefinitely.

What is the etiology of xanthoma?

The *causes* are unknown. Hardaway believes it to be a diathetic affection. It is often seen in association with hepatic derangements. Heredity is said to have an influence. It is rare in childhood, and is generally seen in women of middle age.

What is the prognosis?

The disease is chronic, and the lesions when fully developed are usually permanent. Treatment, unless operative, is unavailing.

What is the treatment?

The destruction of the growth by excision or electrolysis is the only certain procedure.

CLASSIFICATION OF DISEASES OF THE SKIN.

Class I.—Disorders of the Glands.

1. *Of the Sweat-glands.*

Hyperidrosis.
Sudamen.
Anidrosis.
Bromidrosis.
Chromidrosis.
Uridrosis.

2. *Of the Sebaceous Glands.*

Seborrhœa:
- *a.* oleosa.
- *b.* sicca.

Comedo.
Cyst:
- *a.* milium.
- *b.* steatoma.

Asteatosis.

Class II.—Inflammations.

Exanthemata.
Erythema simplex.
Erythema multiforme:
- *a.* papulosum.
- *b.* bullosum.
- *c.* nodosum.

Urticaria:
- *a.* pigmentosa.
- *b.* papulosa.

Dermatitis:
- *a.* traumatica.
- *b.* venenata.
- *c.* calorica.
- *d.* medicamentosa.
- *e.* gangrenosa.

Erysipelas.
Furunculus.
Anthrax.
Pityriasis maculata et circinata.
Dermatitis exfoliativa.
Pityriasis rubra.
Lichen:
- *a.* planus.
- *b.* ruber.

Eczema:
- *a.* erythematosum.
- *b.* papulosum.
- *c.* vesiculosum.
- *d.* madidans.
- *e.* pustulosum.
- *f.* rubrum.
- *g.* squamosum.

Prurigo.
Acne.
Acne rosacea.

Phlegmona diffusa.
Pustula maligna.
Herpes simplex.
Herpes zoster.
Dermatitis herpetiformis.
Psoriasis.
Sycosis.
Impetigo.
Impetigo contagiosa.
Impetigo herpetiformis.
Ecthyma.
Pemphigus.

Class III.—Hemorrhages.

Purpura:
a. simplex.
b. hæmorrhagica.

Class IV.—Hypertrophies.

1. *Of Pigment.*
Lentigo.
Chloasma.
Nævus pigmentosus.

2. *Of Epidermal and Papillary Layers.*
Keratosis:
a. pilaris.
b. senilis.
Molluscum epitheliale.
Callositas.
Clavus.
Cornu cutaneum.
Verruca.
Verruca necrogenica.
Xerosis.
Ichthyosis.
Onychauxis.
Hypertrichosis.

3. *Of Connective Tissue.*
Sclerema neonatorum.
Scleroderma.
Morphœa.
Elephantiasis.
Rosacea:
a. erythematosa.
b. hypertrophica.
Frambœsia.

Class V.—Atrophies.

1. *Of Pigment.*
Leucoderma.
Albinismus.
Vitiligo.
Canities.

2. *Of Hair.*
Alopecia.
Alopecia furfuracea.
Alopecia areata.
Atrophia pilorum propria.
Trichorexia nodosa.

3. *Of Nail.*
Atrophia unguis.

4. *Of Cutis.*
Atrophia senilis.
Atrophia maculosa et st ata.

Class VI.—New Growths.

1. *Of Connective Tissue.*

Keloid.
Cicatrix.
Fibroma.
Neuroma.
Xanthoma.

2. *Of Muscular Tissue.*

Myoma.

3. *Of Vessels.*

Angioma.
Angioma pigmentosum et atrophicum.
Angioma cavernosum.
Lymphangioma.

4. *Of Skin and Subjacent Tissue.*

Rhino-scleroma.
Lupus erythematosus.
Lupus vulgaris.
Scrofuloderma.
Syphiloderma:
a. erythematosum.
b. papulosum.
c. pustulosum.
d. tuberculosum.
e. gummatosum.
Lepra:
a. tuberosa.
b. maculosa.
c. anæsthetica.
Carcinoma.
Sarcoma.

Class VII.—Neuroses.

Hyperæsthesia:
a. pruritus.
b. dermatalgia.
Anæsthesia.

Class VIII.—Parasitic Affections.

1. *Vegetable.*

Tinea favosa.
Tinea trichophytina:
a. circinata.
b. tonsurans.
c. sycosis.
Tinea versicolor.

2. *Animal.*

Scabies.
Pediculosis capillitii.
Pediculosis corporis.
Pediculosis pubis.

ADDITIONAL FORMULÆ FOR USE IN SKIN DISEASES.

FOR INTERNAL USE.

℞. Magnes. sulphatis. ℥ij ;
Acidi sulphurici dil., ʒij ;
Ferri sulphatis, ℈ss ;
Sodii chlorid., ʒj ;
Tinct. cardamom. comp., ʒj ;
Aq. dest., ad Oj.—M.

Sig. A tablespoonful before breakfast in a glass of water.
Use in *eczema* or *acne*. (*Hyde.*)

℞. Fl. ext. taraxaci, f℥iv ;
Potass. acetatis, ʒiv ;
Aq. aurantii flor., ℥ij ;
Aq. dest., q. s. ad ℥iv.—M.

Sig. A teaspoonful in half-glass of water three times a day.
Use in *eczema*, *urticaria*, and *erythema* as an alkaline diuretic. (*Fox.*)

℞. Magnes. sulphatis, ʒiv ;
Magnes. carbonatis, ʒij ;
Spts. ammoniæ aromat., f℥ij ;
Aquæ, q. s. ad f℥iv.—M.

Sig. A teaspoonful three times a day.
Use as alkaline mixture in *eczema*, *urticaria*, and *erythema*.

℞. Ferri citratis,
Sol. potass. arsenitis, āā. ʒiss ;
Acidi citrici, ʒvj ;
Aq. dest., ℥vj.—M.

℞. Potass. bicarb., ℥vj;
Tinct. cort. aurantii, ℥ss;
Syr. aurantii, ℥iij;
Aq., ad ℥vj.—M.

Sig. To a glassful of water add a dessertspoonful from each bottle, and drink during effervescence.

Use in *eczema*. (*Anderson.*)

℞. Quininæ sulphatis, gr. xij;
Pulv. rhei, gr. xxxvj;
Hydrarg. cum creta, ℈j;
Sacchari puri, ℈j.
M. et div. in chart. No. xij.

Sig. Two daily. The dose to be so regulated that the patient has one full natural evacuation per day.

Use in *eczema* for a laxative. (*Anderson.*)

℞. Acidi carbolici, f℥ij;
Glycerini, f℥j;
Aquæ dest., f℥v.—M.

Sig. A teaspoonful in a wineglass of water daily on an empty stomach.

Use in *eczema*. (*Anderson.*)

℞. Atropinæ sulph., gr. $\frac{1}{6}$;
Glycerini,
Aq. dest., āā. ℥ss;
Gum. tragacanth., q. s.
M. et ft. pil. No. xx.

Sig. One pill three times a day.

Use in *urticaria*. (*Schwimmer.*)

℞. Potass. acetat., ℥j;
Spts. æther. nitrosi, f℥ss;
Vin. colchici, f℥ij;
Syr. aurantii, f℥iss.—M.

Sig. A dessertspoonful in water, three times daily, after meals.

Use in *psoriasis* where there is gouty tendency. (*Robinson.*)

℞. Sol. Fowlerii, ℥ij ;
Ammon. carbonat, ʒss ;
Potass. acetatis, ʒj ;
Syr. simp., ʒss ;
Aq. dest., ad ℥xij.—M.
Sig. A tablespoonful in a glass of water twice daily after eating.

Use in *psoriasis*. (*Anderson.*)

℞. Quininæ sulphatis, gr. xviij ;
Acidi sulphurici aromat., ℥ij ;
Syr. aurantii,
Inf. cascarillæ, āā. ℥iss ;
Aquæ, ℥iij.—M.
Sig. A tablespoonful in a glass of water before each meal.

Use in *general hyperidrosis*. (*Anderson.*)

℞. Hydrarg. chlorid. corros., gr. j ;
Aluminis, ʒss ;
Ext. sarsaparillæ, ʒij ;
Glycerin., ʒj ;
Syr. sennæ, ʒiss ;
Spts. anise, ℥j ;
Ext. glycyrrhizæ, ℥j ;
Aquæ fœniculi, q. s. ad ℥viij.—M.
Sig. A tablespoonful several times a day, the dose to be regulated according to the purgative effect.

Use in cachectic cases of old *syphilis*. (*Keyes.*)

℞. Hydrarg. bichlorid.,
Ammonii sesquichlorid., āā. gr. iss–iij ;
Tr. cinchoniæ co., ʒiij.—M.
Sig. A teaspoonful largely diluted in water, after eating.

Use in early *syphilis*. (*Keyes.*)

℞. Hydrarg. bichlorid., gr. iv ;
Tr. ferri sesquichlorid., ℥j.—M.
Sig. Ten drops in water after eating.

Use in early *syphilis* when there is anæmia. (*Keyes.*)

℞. Hydrarg. chlorid. corros., gr. xviij;
Ammon. chlorid., gr. xviij;
Sod. chlorid., ʒj;
Aq. dest., fʒiv.
Dissolve, filter, and add the white of one egg in distilled water sufficient to make ʒiv. Fifteen minims of the solution contain about $\frac{1}{12}$ of a grain of mercury.
Use in *syphilis* by hypodermic injection. (*Staub.*)

FOR EXTERNAL USE.

LOTIONS.

℞. Liq. plumbi subacetatis, ʒij;
Tinct. opii, ʒij;
Spts. camphoræ, ʒj;
Glycerin., ʒij.—M.
Sig. To be mixed with a quart of water and applied on lint.
Use in *acute eczema.* (*Taylor.*)

℞. Picis liquidæ, fʒj;
Potass. causticæ, ʒss;
Aq. dest., fʒiiss.
Dissolve the potash in the water, and add slowly to the tar in a mortar with friction.
Sig. To be used diluted as a lotion.
Use in *eczema.* (*Bulkley.*)

℞. Saponis mollis,
Spts. rectificati,
Olei cadini, āā. ʒj;
Olei lavandulæ, ʒiss.—M.
Sig. Stimulating lotion.
Use in *eczema.* (*Anderson.*)

℞. Acidi salicylici, ℈ij;
Ol. ricini, ʒiv;
Ol. cadini, ʒvj;
Alcohol., q. s. ad ʒiij.—M.
Sig. Stimulating lotion.
Use in eczema.

℞. Potass. fus., gr. v ;
Acidi hydrocyanici dil., gtt. xl ;
Aq. rosæ, ℥j.—M.
Sig. Apply night and morning and when itching is severe.
Use in *eczema* as a stimulant and antipruritic. (*Anderson.*)

℞. Liniment. calcis, f℥iv ;
Belladonnæ ext., gr. xij ;
Zinci oxid., ʒij ;
Glycerini, f℥ij ;
Aq. calcis, f℥iv.—M.
Sig. To be applied at night after bathing the part in hot water.
Use in *eczema* of the genitals. (*Finny.*)

℞. Acidi carbol. cryst.,
Zinci sulphatis, āā. gr. xij ;
Glycerini, ʒiij ;
Aq. rosæ, ad ℥xij.—M.
Sig. Lotion for syringing the ear.
Use in *eczema* of the external auditory canal. (*Anderson.*)

℞. Papainæ, gr. xij ;
Sod. biboratis, gr. v :
Aquæ dest., ʒij.—M.
Sig. To soften *scaly patches* of *eczema*. (*Malcolm Morris.*)

℞. Acidi tannici, ℈j ;
Glycerini,
Spts. vini rectificati, āā. ℥ss ;
Aq. dest., q. s. ad ℥iv.—M.
Sig. Apply morning and evening on a rag.
Use in *pruritus*. (*Squibb.*)

℞. Bismuth. subnit., ʒij ;
Acid. hydrocyanici dil., f℥ij ;
Mist. amygdal., f℥iv.—M.
Sig. For use in *pruritus*. (*Bulkley.*)

℞. Acidi hydrocyanici dil., f℥ij ;
Glycerini, f℥iij ;
Aq. rosæ, f℥vj.—M.
Sig. Apply for *pruritus*. (Anderson.)

℞. Spts. camphoræ, fʒss;
Boracis, ʒij;
Glycerini, fʒij;
Aq. fluv., fʒvj.—M.
Sig. To be well shaken and applied externally.
Use in *pruritus*. (*Taylor.*)

℞. Saponis viridis, ʒij;
Spts. vini rectificati, ℥j;
Solve, filtra, et adde
Spts. lavandulæ, ʒij.
Sig. Shampoo in *seborrhœa capitis* and for the face in *acne*.
(*Hebra.*)

℞. Zinci sulphatis,
Potass. sulphuret., āā. ʒj;
Aquæ dest., q. s. ad fʒiv.—M.
Sig. Apply to the face twice daily.
Use in *acne* and *A. rosacea*.

℞. Sulphuris loti, ʒiij;
Spts. camphoræ, fʒiij;
Sod. biborat., ʒij;
Glycerini, fʒvj;
Aq. fontan., ad fʒiv.—M.
Sig. Shake well, and apply freely, leaving a thin film of powder over the face.
Use in *acne*. (*Taylor.*)

℞. Sulphur. præcip., ʒij;
Glycerini, fʒij;
Alcoholis, fʒj;
Aq. calcis, fʒj;
Aq. rosæ, fʒij.—M.
Sig. Shake well before using.
Use in *acne*. (*Duhring.*)

℞. Hydrarg. bichlorid., ʒj;
Aquæ dest., ʒiv;
Ovorum iij albumen;
Succi citri, ʒiij;
Sacchari, ℥j.—M.
Sig. "Oriental lotion."
Use in acne. (Helm.)

℞. Acidi lactici, gr. xv ;
Acidi boracici, ʒiss ;
Aq. destil., ʒvij ;
Spts. vini rect., ʒj.—M.

Sig. Apply to the scalp once or twice daily with rubbing.
Use in *alopecia*. (*Pohl Pincus.*)

℞. Resorcin pur., ʒiss ;
Ol. ricini, ʒiss ;
Spts. vini, ʒv ;
Bals. peruv., gtt. x.—M.

Sig. Rub into the scalp daily with a piece of flannel.
Use in *alopecia*. (*Ihle.*)

℞. Tinct. nucis vom., ʒss ;
Tinct. cantharidis, ʒvj ;
Glycerini, ʒij ;
Aceti destillati, ʒss ;
Aq. rosæ, ad ʒvj.—M.

Sig. Apply to the scalp once daily.
Use in *alopecia*. (*Tilbury Fox.*)

℞. Tinct. cantharidis,
Tinct. capsici, āā. ʒss ;
Ol. ricini, ʒj ;
Aq. cologn., ʒj.—M.

Sig. Apply to the scalp once daily.
Use in *alopecia*. (*Bulkley.*)

℞. Ol. ricini, ʒss ;
Acidi carbolici, ʒj ;
Tinct. canthar., ʒss ;
Ol. rosmarin., gtt. xv ;
Spts. vini rect., ad ʒiv.—M.

Sig. For external use over the scalp, with friction.
Use in *alopecia areata*. (*Hyde.*)

℞. Zinci sulphat.,
Potass. sulphuret., āā. ʒss ;
Spts. vin. rectif., fʒiij ;
Aq. rosæ, fʒiiiss.—M.

Sig. To be diluted as required for external use.
Use in *lupus erythematosus* as a gentle stimulant. (Duhring.)

℞. Hydrarg, chlorid. corros., gr. vj ;
Acidi acetici dil., ʒij ;
Boracis, ℈ij ;
Aq. rosæ, fʒiv.—M.

Sig. Apply night and morning, at first with gentle brushing, afterward by rubbing.

Use for *freckles*. (*Bulkley*).

℞. Hydrarg. chlorid. corros., gr. vss ;
Zinci sulphatis,
Plumbi subacetatis, āā. ʒss ;
Aq. dest., fʒiv.—M.

Sig. Apply twice daily.

Use in *chloasma*. (*Van Harlingen.*)

℞. Hydrarg. bichlorid., gr. vj ;
Acidi muriatici dil., fʒj ;
Glycerini, fʒj ;
Alcoholis,
Aq. rosæ, āā. fʒij ;
Aq. pur., fʒiv.—M.

Sig. Apply twice daily.

Use in *chloasma*. (*White.*)

℞. Acidi salicyl., ʒss ;
Cannabis indicæ ext., gr. v ;
Collodii. flex., ʒss.—M.

Sig. Paint over wart with a camel's-hair pencil.

Use for *verruca*. (*Hyde.*)

℞. Zinci sulphatis, gr. x ;
Tinct. lavand. comp., ♏ xv ;
Aq. dest., q. s. ad fʒiv.—M.

Sig. Apply with a piece of lint.

Use as a simple dressing in *chancre* or *ulcer*. (*Taylor.*)

℞. Hydrarg. chlorid. corros., ℈j ;
Saponis virid., ʒij ;
Spts. vini rectif., ʒiv ;
Ol. lavandulæ, ʒj.—M.

Sig. For external use.

Use in *chromophytosis*. (*Anderson.*)

℞. Chrysarobin., ℈ij ;
Collodii flex., ʒvj ;
Ol. ricini, ʒss.—M.
Sig. Paint over the patches with a camel's-hair pencil.
Use in *trichophytosis capitis.* (*Jackson.*)

℞. Acidi pyrogallici, ʒss–ij
Acidi salicylici, ʒss ;
Collodii flex., ʒij.—M.
Sig. Paint the part with a camel's-hair pencil.
Use in *trichophytosis capitis.* (*Elliot.*)

OINTMENTS.

℞. Bismuth. oxidi, ʒj ;
Acidi oleici, ʒviij ;
Ceræ albæ, ʒiij ;
Vaseline, ʒix ;
Olei rosæ, ♏ v.—M.
Sig. Soothing ointment.
Use in *eczema* and *dermatitis.* (*Fraser and Green.*)

℞. Pulv. camphoræ, ℈j ;
Pulv. zinci oxidi, ʒij ;
Glycerini, ʒj ;
Adipis benzoati, ʒj ;
Cochinillæ, gr. j ;
Olei rosæ, ♏ j.—M.
Sig. For soothing ointment.
Use in *eczema* and *dermatitis.* (*Anderson.*)

℞. Olei oliv., ʒxv ;
Lithargyri, ʒiij et ʒvj ;
Fiat ung. et adde
Ol. lavandulæ, ʒiij.—M.
Sig. Hebra's diachylon ointment.
Use in *eczema* and *dermatitis* for soothing application. (*Hebra.*)

℞. Ung. hydrarg. ammoniat., ʒiss ;
Hydrarg. subchlorid., gr. v ;
Ol. cadini, ♏ xx ;
Glycerini, ʒj ;
Ung. simplicis, ʒvss.—M.
Sig. Mild stimulating application.
Use in chronic *infantile eczema.* (Anderson.)

℞. Hydrarg. ammoniat., ℈j ;
Adipis, ʒss ;
Sevi benzoinat., ℈vij ;
Ol. amygdal. dulc., ♏x ;
Vaseline, ad ʒvj.—M.

Sig. Stimulating application in *eczema*.

(*Van Harlingen.*)

℞. Tragacanthæ,
Glycerini, āā. ʒiv ;
Boracis, ʒss ;
Aquæ dest., q. s. fiat paste.

Sig. Paint the part freely with the paste, and let it dry. It can be washed off with soft water.

Use in *eczema of the beard*. (*Provan.*)

℞. Zinci oxidi,
Pulv. aluminis plumosi,
Pulv. rad. iridis floris, āā. ʒj ;
Pulv. amyli, ʒij.—M.

Sig. Dusting powder.

Use in *eczema*. (*Hebra.*)

℞. Pulv. camphoræ, gr. x ;
Cretæ præparat., ʒj ;
Ol. lini, fʒij ;
Bals. peru., ♏xx.—M.

Sig. For use in *dermatitis*. (*Kaposi.*)

℞. Zinci carbonatis (pur.) ʒiv ;
Glycerini,
Ol. cadini, āā. ʒj ;
Ung. aq. rosæ, ʒviij.—M.

Sig. Rub thoroughly into the affected part night and morning, or oftener if itching is present.

Use in *pityriasis rubra* and *eczema erythematosum*.

(*Anderson.*)

℞. Sod. biboratis, ʒss ;
Tragacanth., ʒj ;
Spt. rectificati, fʒij ;
Glycerini (pur.), fʒiv ;
Aq. dest., fʒiss.—M.

Sig. Smear a little over the excoriated part and allow it to dry.

Use as a protective in *pemphigus foliaceus*.

℞. Zinci oxidi, ʒvj;
Acidi salicylici, gr. xv;
Glycerini, ʒvij.—M.
Sig. Apply as required.
Used in *pruritus vulvæ*. (*Jullien.*)

℞. Hydrarg. ammoniati, ʒj;
Ol. cadini, ʒj;
Glyceriti amyli, ʒij;
Ung. zinci benzoat., ʒiv.—M.
Sig. Rub into affected parts night and morning.
Use for *pruritus* following *pediculosis*. (*Anderson.*)

℞. Sulphur. præcip.,
Ol. cadini, āā. ʒiss;
Sapon. viridis,
Adipis, āā. ʒiv;
Cretæ, ʒj.—M.
Sig. Rub thoroughly into the parts.
Use in *prurigo*. (*Hebra.*)

℞. Sulphur. præcip., ʒxij;
Potass. subcarb., ʒvj;
Adipis, ʒix.—M.
Sig. Rub over the entire surface at night.
Use in *scabies*. (*Hardy.*)

℞. Sulphur. præcip.,
Picis liq., āā. ʒiss;
Sapon. virid.,
Adipis, āā. ʒiv;
Cretæ, ʒj.—M.
Sig. Apply at night.
Use in *scabies*. (*Wilkinson.*)

℞. Styracis liq., ʒj;
Petrolei,
Ol. olivæ, āā. ʒss;
Bals. peruv., ʒiiss;
Tinct. sapon. virid., ʒv.—M.
Sig. Apply at night.
Use in *scabies* in adults. (Kaposi.)

℞. Hydrarg. ammon., gr. lx;
Hydrarg. chlor. mitis., gr. lxxx;
Petrolati, ad ℥j.—M.
Sig. Rub in the scalp at night.
Use in *alopecia* and *seborrhœa capitis*. (*Jackson.*)

℞. Calcis, ʒij;
Sulphur. præcip., ʒiv;
Aquæ dest., ℥iv.—M.
Boil and stir constantly till a homogeneous mixture is produced, then pass through a sieve.
Use in *acne*. (*Vleminckz.*)

℞. Hydrargyri, ʒiv;
Terebinth. commun., ʒij;
Ceræ flavæ, ʒiij;
Empl. plumbi, ℥iss.—M.
Sig. Apply to the parts at night.
Use in *rosacea* with hypertrophy. (*Neumann.*)

℞. Saponis mollis,
Picis liquidæ,
Spts. rectificati, ää. ℥j.—M.
Sig. Rub thoroughly into the patches.
Use in *psoriasis*. (*Hebra.*)

℞. Argenti nitrat., gr. xv;
Ammon. carb., gr. xxij;
Ung. adipis, ℥j.—M.
Sig. Dye for hair.
Use in *canities*. (*Kaposi.*)

℞. Acidi arsen., gr. vj;
Hydrarg. sulphuret. rub., ʒss;
Ung. aq. rosæ, ℥ss.—M.
Sig. Arsenical paste.
Use in *carcinoma*. (*Hebra.*)

INDEX.

F.

G.

H.

I.

K.

L.

M.

N.

O.

P.

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